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KELLER'S

Garden Annual

GEO. KELLER & SONS 909 Maine Street

QUINCY, ILLINOIS

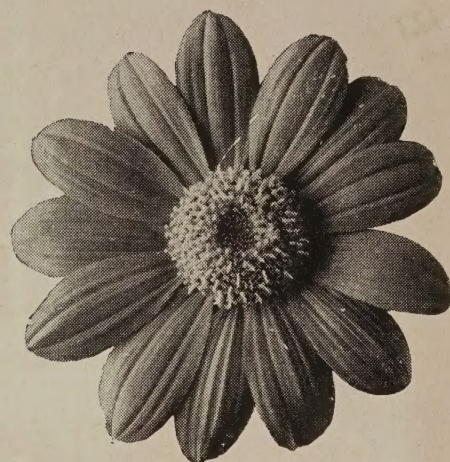
**WINNER FOR 1951
ALL AMERICAN
BRONZE MEDAL**



MARIGOLD, Glitters—Clear yellow. A double Chrysanthemum-flowered beauty, 2½ to 4 feet tall. Bushy, with long cutting stems. 3 to 4 inch flowers. Blooms early. Pkt. 25c.



**WINNER FOR 1951
ALL AMERICAN
SILVER MEDAL**

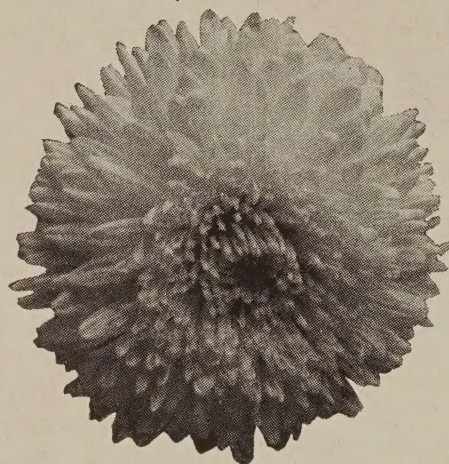


TITHONIA, Torch—A fiery scarlet Annual. Compact. Upright, bushy form and comparatively dwarf with its 4 foot height. Profuse 4 inch single flowers. Pkt. 25c.



PETUNIA, Fire Chief (above)—All America Gold Medal winner in 1950. Bright, velvety red. An excellent choice for edgings, borders, boxes and pots. Pkt. 35c.

CLEOME, Helen Campbell (below)—A new delicately formed white member of the "Spider Plant" family. Pkt. 15c.



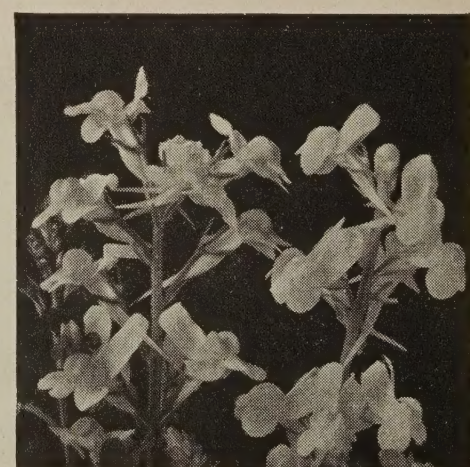
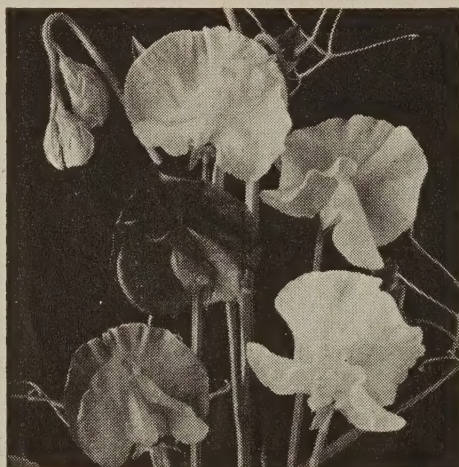
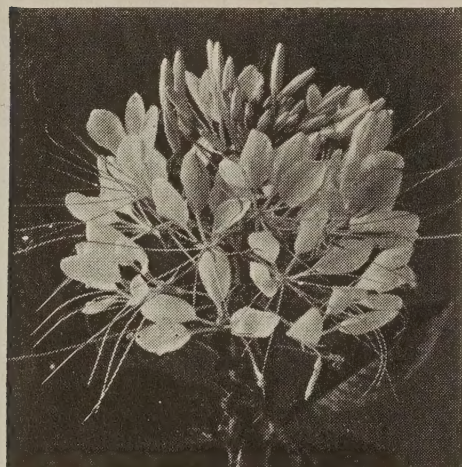
ASTERS, Princess Elizabeth (above)—A pure white, long awaited in the Princess class. Margaret, a deep florist rose and Susan, a clear blue. All excellent cut flowers having quilled centers. Pkt. 25c.

SWEET PEAS, Cuthbertson (below)—We feature Cuthbertson this year not because it is new (it isn't) but because its' heat resisting hardiness, exceptionally fine growing performance, long stems and beautiful colors has recommended itself to the amateur as well as professional flower gardener for 1951. Mixed or individual colors. Pkt. 15c.



ZINNIA, Peppermint Stick—Here's a refreshing garden surprise. Flowers are basically red with white stripes or yellow, running longitudinally with the petal. Stripes vary in width. About 70% of them have this characteristic, balance are completely red. Pkt. 25c.

LINARIA, Northern Lights (below)—New. Exceedingly brilliant snapdragon colors of warm reds, yellows, strong lavenders, 15 inches high. A quick grower. Pkt. 25c.



LIMITED WARRANTY CLAUSE—Our Company warrants to the extent of the purchase price that seeds or bulbs sold are as described on the container within recognized tolerances. Seller gives no other or further Warranty, express or implied.

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THE GARDEN BOOK The Garden Annual OF THE YEAR

Here's a real help for garden planners

As you'll see, we have crammed this book with FACTS. We've set down here, as far as is humanly possible, the practical answers to the hundreds of questions that every seedsman is asked, every year.

Whether you are an experienced gardener or a beginner, we're sure you'll find much that is helpful in these pages—now and later on. We suggest, then, that you can begin using this book the very day you receive it. Use it first as a guide for your planning—and later, as a guide for more effective action all through the season.

WE OFFER . . .

complete year-around, local garden service

There's a year-round working partnership between us and our gardening customers. They like to shop here, because they know that, whatever the season, we're always ready to counsel with them and to supply all their garden needs.

only good, fresh seeds, packet or bulk

We get along so well with our gardening friends because they know we do everything in our power to bring them the best of seeds, always! A packet or a ton, for home gardener or professional grower, it's always the finest we can procure.

a complete supply service for all gardeners

One excellent reason why you NEED the services of a store like ours is the COMPLETENESS of our service.

As seed professionals, we know what you'll need at every step of the way. That's why it's so satisfying to shop here for garden supplies.

cheerful and expert garden counsel

Our practical knowledge of gardening is part of our stock in trade. We want all your gardening efforts to be successful, and we try to do all we can to make them so. As "Garden Headquarters" we feel that's part of our job! Come in and talk it over!



Happy Springtime to You Neighbor!



Gardening is a Family Affair—Everybody benefits

Here's a Friendly Greeting from **YOUR SEED STORE**

*. . . a message from a seedsman who lives
works and gardens right here in your
own home territory*

This year we are proud to bring you our 1951 Garden Annual. It is far more than a seed catalog, it is a practical gardening reference book. We are sure you will find our book so useful and valuable you will want to keep it around for a long, long time.

Our job as we see it, is to competently serve the gardeners and growers of our own area. We work always with the needs of our own neighbors' gardens in mind. Our stocks are carefully and conscientiously selected to meet local needs—because we sincerely believe this is an important objective that insures the ultimate harvesting success of our gardening neighbors.

Don't you agree then, that it is wise to shop here where your own gardening needs and problems are understood, than to shop afar for seeds and supplies?

Gardening is a family affair—and our family wishes yours success in your gardening activity during the coming year. May we see you soon . . . and often.

PRICES: All prices in this catalog are subject to change without notice.

MAIL ORDERS: On mail orders, all packet seeds are sent postpaid. On all other items, add parcel post charges to your remittance.

NOTE—If any of your gardening friends have not received this catalog, and would like to have a copy, just let us know. But please do so early, as the supply is limited. And, incidentally, if you, yourself, have any comments to make on our book (good or bad) we hope you'll let us have them—in person or by letter. We like a pat on the back—and we appreciate constructive criticism, too.

How to Increase Home Beauty and Property Value with a Fine Lawn

Like the carpet on the floor, a home is unfurnished and unfinished unless your landscaping is built on a fine lawn. There's only one kind of "good" lawn . . . the kind that grows, rich and green, in **every** spot you want it. "Cheap" lawn seed is no bargain! **It's the kind of seed and the proportions of mixture that count in determining a dependable lawn seed value.**

The only sure way to get such a mixture is to depend on a seed specialist who knows our local soils and growing conditions. Whether you are building or restoring your lawn it will pay you to come in and talk it over.

Starting a New Lawn

SOIL PREPARATION. Spade or plow the area to a 8 or 10 inch depth. Pulverize the soil thoroughly. A heavy clay soil can be lightened by mixing with sand and humus. A light soil can be improved by adding a top dressing of heavier soil. For best results soil should be slightly heavy. If the soil is acid, scatter crushed limestone.

Peat moss or Terralite are invaluable additions to both light and heavy soils because they help retain soil moisture without allowing the water to be dissipated down below the root lines. Too, they keep soil particles loose and friable. Spade them into the soil or apply as a top dressing at least half an inch deep. In a heavy clay soil use one inch or more. A newly planted lawn needs a rich well-balanced soil, because grass roots are heavy feeders. By feeding the soil the vital elements contained in plant food, such as nitrogen, phosphorous, potash, etc., you are headed toward a successful planting. We can recommend the best plant food for your local soil condition.

Mix the lawn food with a top dressing or rake and work it well into the soil. Because fresh manure usually contains weed seeds its use is not advisable for a new lawn.

SEEDING. The generally accepted rule for the amount of seed required is five pounds per thousand square feet. Skimping on seed in quality or quantity is costly in time and labor. A well sown lawn checks the immediate introduction and development of weeds. Too much seed retards growth. Choose a calm windless day for sowing. A more uniform distribution of seed is possible with a spreader. Whether sown by hand or spreader, however, sow in two directions, one at right angles to the other. This insures against leaving bare grassless areas.

Rake the seed into the soil lightly or brush it in by dragging some light flexible object over it such as a sack. The seed should be covered by an eighth of an inch of fine soil or new top dressing.

ROLLING. May be properly employed to press the soil firmly around the new seed. Use a light water ballast roller, empty to one third full. Remember the soil becomes compacted if rolled too heavily too often or when wet and sticky. For leveling your lawn whether new or old use top dressing, never a roller.

WATER with a fine spray so the seed bed will not be disturbed. If the normal moisture is enough to keep the lawn just slightly damp try not to water it again until the seed has germinated, but do not let it get dry at any time.

In the Spring

Fine lawns start with very early spring care. Here are some suggestions:

1. **REMOVE** all the winter accumulations of leaves and debris by raking.
2. **APPLY PLANT FOOD** as directed by the manufacturer. If grass has started apply when grass is dry, then soak the lawn to wash the plant food off the blades and into the soil.
3. **RE-SEED** thin and bare spots using about a pound to each 200 square feet. Pulverize the soil in bare spots, then cover the seed lightly.
4. **ROLL** the lawn with a lightweight roller when soil is dry enough to prevent compacting.

Fall planting offers many advantages in lawn starting. If you plant in the spring, seed early—long before you begin work on your flower garden, for seedlings need a chance to grow sturdy before weeds germinate. Planting delayed until mid-summer can be successful if diligently followed by ample watering and weeding.

During the Summer

1. **MOW** frequently enough to keep grass from exceeding a 2½ inch height. Set the mower to cut about 1¼ inches high. Very close cutting scalps the rough spots and unless done extra-frequently injures the grass by sudden exposure to the sun after it has been shaded by dense growth. Short mower clippings left on the lawn are beneficial. They are harmful however if the quantity is so great the grass is smothered and new growth retarded.
2. **WEED CONTROL** with the many excellent and selective types now available assures weed elimination with the least effort and time. Get those weeds early before they seed or spread and your summer lawn care is considerably easier. Refer to our weed killer selection in the back of our Garden Annual.
3. **WATERING** is a point that depends much on your good judgment. If the turf is dry it is far wiser to soak limited areas to a six to eight inch depth on successive evenings than to sprinkle the whole lawn with a limited supply of moisture that will attract the dry grass roots up to the surface. Water sloping areas more liberally at the top to compensate for drainage losses.

Fall Lawn Care

FEEDING the lawn with a balanced plant food and seeding the bare and thin spots will amply reward your effort the following spring with a sparkling, healthy new growth.

Fall Is A Good Time To Make A New Lawn. During the moderate fall weather, grass seed germinates quickly and makes vigorous growth. Also, few weeds germinate in the fall, thus permitting the lawn to flourish without interference.



**LAWN
TROUBLES?
CONSULT
US!**

**A BLEND OF
SEED
FOR EVERY NEED**

FOR SUNNY SPOTS



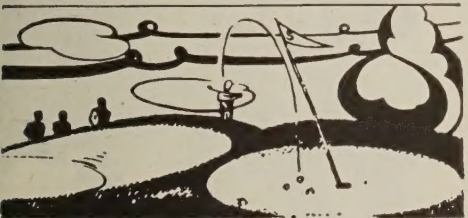
Every sunny lawn site is a separate problem. No single variety of seed or mixture takes care of all situations. But there is a best seed or combination for YOUR sunny lawn and we know them. Let us help you plan and grow the lawn you want.

... OR SHADY LOTS



Cool shade is an extra difficulty in lawn growing. Wherever it exists, you need our special shade mixture. These excellent, shade enduring grasses and clovers have given superb results on many shaded lawns in this section.

... OR SPECIAL NEEDS



Parks, playgrounds, and golf courses need their own types of grass . . . all different. We have the right seed for all special uses. Just bring your problem to us . . . we'll furnish the seed you need and the know-how to make it grow.

How Much Seed?

Skippy seeding is costly in the long run. Plant enough to get a thick, heavy mat of grass and you'll need far less reseeding. The wise minimum for new lawn planting may be figured from this table:

Size of plot	Square feet	Amount of seed
10x20	200	1 lb.
20x50	1,000	5 lbs.
20x100	2,000	10 lbs.
50x100	5,000	25 lbs.
100x100	10,000	50 lbs.

For re-seeding, use at least half the amount.

A Good Lawn Starts From Good LAWN SEED AND LOCALIZED KNOW HOW

Many fine lawns in our area got their start right here in our store. A knowledge of our climatic and soil conditions plus the experience of knowing what seeds grow best under given conditions is your assurance that we know what your lawn needs.

ASTORIA BENT

Produces numerous root stocks which spread underground and throw up new shoots, making a very thick turf. This Bent has a good color and is excellent for lawns and putting greens. Does not require as much cutting as Creeping Bent.

SEASIDE BENT

A true creeping Bent. The plant is dwarf, and multiplies rapidly by sending out runners in all directions. With proper watering and care, it makes a strong, enduring turf. If damaged it heals over promptly.

CHEWINGS FESCUE

A superb grass to grow in rather shaded areas and even on fairly acid soil and under other unfavorable conditions. Plants grow low, make a dense turf. Often used for putting greens and fairways.

WHITE DUTCH CLOVER

Although not a grass, White Clover is very desirable in lawn mixtures because of its rapid, low growth and creeping stems. Valuable as a green cover for poor ground. Succeeds best on moist ground or during wet season.

OUR FINEST LAWN MIXTURE

Our SELECTED lawn mixture is a combination of the finest quality seeds—which we have developed after years of experience. All the grasses in it are fine-bladed and deep-rooting. There just isn't any better combination than this for the lawns of our territory!

KENTUCKY BLUE GRASS

Produces a deep dark green lawn of close thick turf. Maintains its green color until late in fall. Roots are deep, and plants are very hardy.

DOMESTIC RYE GRASS

A quick-growing annual, valuable in lawn mixtures as a nurse crop, to keep lawn green while better, slow-growing varieties are becoming established. Succeeds well on almost any soil.

PERENNIAL RYE GRASS

A quick growing grass, most suitable for mixtures. Succeeds on almost any soil not water sogged.

RED TOP

Particularly suitable for wet, low spots, as it stands wet weather or even overflowing, better than other grasses. Also does well on almost any good, rich soil. Often thrives where Blue Grass fails—and therefore makes an excellent supplement for it.

OTHER GRASSES

Besides the lawn grasses listed here, we can also supply just about any other grasses you may need. We carry a complete line of all varieties that can be successfully grown in this part of the country. Just tell us what you want!

OUR SPECIAL SHADE MIXTURE

Our SHADE lawn mixture is a scientifically developed blend of top quality shade enduring grasses and clovers. We've been getting excellent results with it for years and believe it will produce results anywhere that grass can be made to grow.

One-Stop Service

For All YOUR LAWN NEEDS

- SEEDS
- PLANT FOODS
- WEED CONTROLS

Whatever your lawn situation may be, it's a good idea to ask us about it!

● You can depend on us for the greatest bargain in lawn seed—the most grass of the best type per dollar.

● Food deficiencies in soil causes slow and sparse growth. We have the very best fer-

tilizers and special lawn foods to correct any condition.

● You can free your lawn of weeds in a few days. Powerful easy-to-use weed controls have made it simple. We have a full range of tested varieties.

WHATEVER THE NEED, IT WILL PAY YOU TO SEE US FIRST

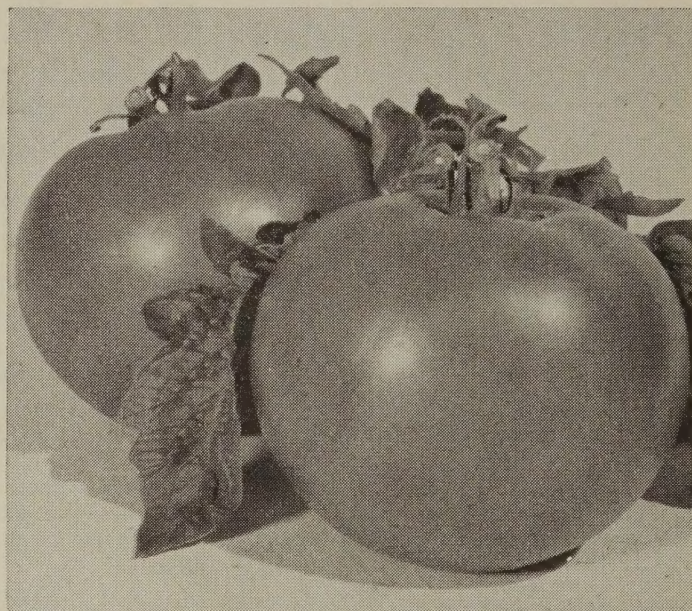


OUTSTANDING VEGETABLE VARIETIES RECOMMENDED FOR YOUR TRIAL



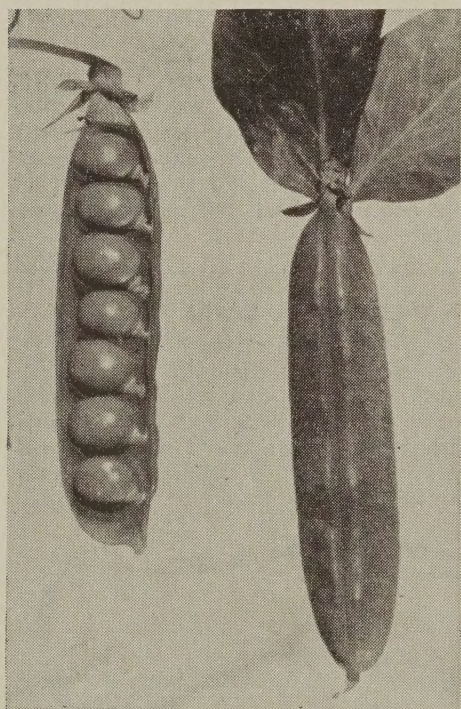
TOPCROP BEAN

An excellent bush bean that won the All American Gold Medal for 1950. It is outstanding for its productiveness. Does well in the home garden, market garden and is excellent for commercial processing. Round, medium, light green pods 5½ to 6 inches long. Maturity in about 51 days.



RUTGERS TOMATO

Year after year the Rutgers tomato consistently retains its popularity. Its' excellent flavor, bright red color, meaty walls and small cells makes it an obvious choice for the home or market gardener. The Rutgers plants are wilt resistant with sturdy stalk and vigorous foliage. Matures in 75 days.



Little Marvel Peas

(Above) Here is a heavy yielding pea. Vines are about 18 inches high. The 3" pods bear 7 or 8 large peas. Pods are square ended, nearly round in diameter and tightly packed. They are very tender and light green in color. A good choice for freezing. 62 days.

Early Scarlet Globe Radish

Here's a bright red skinned, white fleshed, consistently good favorite among radishes. It has a slightly elongated globe shape. It grows to perfection in rich, loose prepared soil. Radish growth should be quick to get that desirable tasty crispness. Radishes left in the ground too long become bitter and pithy. Matures in 24 days.



Calif. Wonder Pepper

(Left) For cooking stuffed, the California Wonder is always a good choice. When chopped, its sweet flavor makes it an excellent addition to salads. It is a prolific grower, each fruit is about 4 inches long by 3½ inches wide. The California Wonder is recommended for the market grower as well as the home gardener. Maturity time is 75 days.

A black and white collage featuring a variety of fresh vegetables like corn, carrots, and leafy greens, interspersed with numerous small seed packets. Each packet is labeled with the name of a vegetable, such as 'PEAS', 'CUCUMBER', 'TOMATO', 'CORN', 'CABBAGE', and 'LETTUCE'. The central text 'VEGETABLE SEEDS' is written in a large, bold, serif font, with 'VEGETABLE' on the top line and 'SEEDS' on the bottom line.

From among all the thousands of available varieties, we have selected those which will produce the best quality and the greatest yields in the gardens of our territory. So we offer you this compact selection as a safe, sound base for your plans.

VEGETABLES FOR FREEZING

The Symbols (fr) following the variety names indicates vegetables suitable for home freezing.

ASPARAGUS

A hardy perennial; will bear over 20-year period if properly cared for. We recommend purchase of ASPARAGUS ROOTS rather than seeds, as roots produce crop 2 years earlier. If seed is used, sow thinly in drills in early Spring. Cover to $\frac{1}{2}$ " depth. Soak seed 24 hrs. before planting. Sow in loose, rich, moist soil after weather warms up. Thin to stand 6" apart. When a year old and in early spring transplant in well enriched beds in permanent position, 24" apart, in rows 20" apart. Set in hole so that crown is 8" below surface, but only cover tips with 3" of soil. As plants grow, fill in until level. Don't cut first year after setting.

Mary Washington (fr)—Thick, tall green spears with purple tops. Highly rust resistant. Rapid growing. Tender.

BEANS

Green Podded, Dwarf or Bush
Black Valentine Stringless (fr)—Hardy, early maturing, very productive. Pods, dark green, 6-6½ in. long, brittle, smooth, stringless. Seeds black. Matures in 49 days.

Bountiful (fr)—An early, heavy-yielding variety. The leading flat podded bean for market and home use. Flat,

light-green, stringless, but slightly fibrous pods of finest quality. 47 days.

Stringless Green Pod (fr) — Large, sturdy plants. Meaty round pods, brittle and strictly stringless. Medium green pods, oval, yellowish-brown seed. 54 days.

Giant Stringless Green Pod — 5¾"
 pods almost round. Meaty, stringless
 and brittle. Medium. Green. 53 days.

Plentiful—Productive, early. Flat, medium green pods, 6 to 7-in. long, strictly stringless. Choicest quality. All-America Medal. 51 days.

Tendergreen (fr) — Large, erect plants. Abundant, round, dark-green

pods, strictly stringless and fleshy. 54
 days to maturity.

Wax Podded, Dwarf or Bush

Improved Golden Wax (fr)—Small, erect plants, moderately productive. Straight, thick, flat pods, creamy yellow and stringless. 51 days.

Pencil Pod Black Wax (fr)—Stocky, large, strongly productive plants. Pods, golden yellow, tender, stringless. 55 days to maturity.

Sure Crop Stringless—Handsome, rich yellow pods. Sturdy, brittle. 6-6½ in. long. Strictly stringless. 53 days.

Continued on Next Page

HOW TO GROW BETTER BEANS

Bush Beans *early set of pods. By spraying with a fruit*

Don't plant until the weather is warm and settled.

Sow beans in bottom of furrow, 3" to 4" deep and from $2\frac{1}{2}$ to $3\frac{1}{2}$ feet between rows, but do not fill in with more than $1\frac{1}{2}$ " of soil over seeds. Press soil firmly over seeds, but do not pack hard. Thin to stand 4" to 6" apart in row. Bean seedlings are likely to be slowed up pushing through heavy soil. In such soils, cover seeds with mixture of half sand and half soil, or sand and peat or any other loose, light material that will allow seedlings to break through easily. Thin young plants to about 6" apart. Keep cultivated until plants blossom. (DO NOT CULTIVATE when blossoms are at prime or when plants are wet with dew. Keep vines picked to insure a larger bearing period.) Make plantings every two weeks for supplies throughout the season.

— Two scientific facts about beans will help produce better crops. First, being legumes, they should be inoculated with special legume culture listed in supply section. This enables plants to manufacture their own nitrogen from the air. Second, bud drop of the tiny flowers (even before they can be easily seen) cuts the

early set of pods. By spraying with a fruit setting spray these buds are held on and the early crop increased by as much as 100 per cent.

Growing Pole Beans

In warm ground, set poles 4' to 8' long slanting a bit to the north in rows 4' apart. (Extending north and south the poles will be 8' apart in the row.)

Anchor well as heavy beanvines blow over easily.

Plant 5 to 8 beans about 1" deep around each pole. When growth is sufficient thin to four plants.

Sometimes three poles set to form a tepee are used and several seeds planted around each tepee.

Caution: To avoid spreading plant diseases, do not cultivate or pick when plants are wet.

Lima Beans

Plant in dry, warm ground. Make rows 2' apart and drop beans 6" apart in row. Plant Lima Beans with the eye down to assist quick germination. Cover with 1" of soil. Can also be planted in hills, 3" apart one way and 2' apart the other way. Use 4 to 6 beans per hill.

All vegetable seeds

10c Per Packet

Unless otherwise noted

BEANS, Continued

TOPCROP BEAN (fr)

All America Gold Medal Winner for 1950. 51 days. One of the outstanding horticultural introductions in recent years. Does well in the home garden, market garden and is excellent for commercial processing. 5½ to 6 inches long, round, medium light green pods. ½ lb. 45c.

Beans, Pole

London Horticultural or Cranberry—Hardy, good climber. 5" pods flat-oval, dark green when young, splashed with red. Slightly curved, stringless, little fiber and very fleshy. 70 days.

Kentucky Wonder Wax (fr)—Vigorous, good climbing plants waxy-yellow pods, flat and nearly stringless. Somewhat fibrous but meaty. 68 days.

Kentucky Wonder (fr)—Strong climber, hardy, long-bearing. Curved, almost round pods. Slightly stringy, but brittle and fibreless. Meaty. 65 days to maturity.

Lima, Dwarf or Bush

Burpee's Improved Bush (fr)—Best of flat seeded bush limas. Pods contain four or five large beans of excellent quality. 75 days. Pkt. 15c.

Fordhook Bush (fr)—Straight pods with plump, large beans, excellent quality.

Henderson's Bush (fr)—Known as Baby Lima or Butter Bean. Plants small, early and bushy. 65 days. Very productive.

Lima, Pole

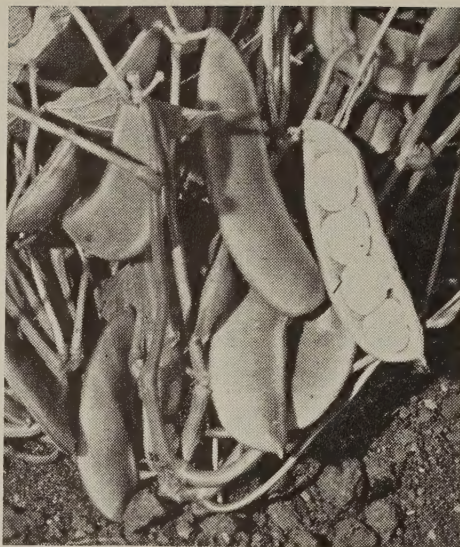
Follow same plan as for other pole beans but plant seed two weeks later.

King of the Garden (fr)—Flat, smooth pods with four or five white, large, flat beans. 88 days.

BEANS, SHELL

Navy—Small seed, almost round and white. Hardy, prolific. Most popular for baking. 95 days.

Red Kidney—Pods 6-7 in. long. Flat large beans, pinkish red to mahogany in color. Rich flavor. 95 days.



FORDHOOK BUSH LIMA

BEETS

Deep, rich sandy loam produces finest beets. As soon as ground can be worked sow in drills 18" apart and press soil firmly over seed. Each "seed" is a fruit with several true seeds. No matter how thinly beets are sown, they will need thinning. Make three sowings, one early, one three weeks later and one 60 days before fall. When tops are 3" to 6" tall pull them and use for cooked greens. Continue this until roots stand 6" apart.

Crosby's Egyptian (fr)—Widely grown for early beets. Flattened globe shaped roots with small tap root. Excellent quality, tender and sweet. 60 days to maturity.

Detroit Dark Red (fr)—Standard of excellence in table beets. Smooth, globular roots of deep ox-blood red—sweet and tender. 68 days.

Early Wonder—Early variety. Semi-globular, tender, blood-red. 58 days.

BEETS, STOCK (Mangel Wurzel)

Sow seeds in early fall and spring in rows. Plant 2½" to 4" apart. Later thin to 10" apart.

Mammoth Long Red—Very popular, 30 to 50 tons per acre. Roots grow half above the ground. Light red, flesh white with rose tinge. 110 days.

BROCCOLI

Plant and cultivate like cabbage and cauliflower.

Italian Green Sprouting (fr)—Plant bears a succession of sprouting heads about 5-in. long, which, if kept cut, will be replaced by others 8 to 10 weeks. 55 to 65 days.

BRUSSELS SPROUTS

Easy to grow wherever conditions are favorable for late cabbage, and requires same culture. As sprouts begin to form remove lower leaves so that all nourishment sent to lower stem will be forced into the sprouts. Do not use until after heads have matured.

Long Island Improved—Compact, uniform dwarf size plants. Cabbage-like sprouts 1¼" to 1½" in diameter. One of the most dependable varieties Edible in 90 days.

SWISS CHARD

Requires about same treatment as beets. Cultivate frequently. Leaves may be gathered during summer and fall. New ones will grow quickly.

Lucullus—Most popular Chard. Upright in growth, with yellowish-green curled, crumpled leaves. Thick, broad and light green stems. 50 to 60 days.

Rhubarb Chard—Heavily crumpled leaves, dark green with a translucent crimson stalk. Easily grown, everywhere. A different, tasty, delicious flavor—cook stalks and leaves together for a new taste thrill. 60 days.

CABBAGE

Sow seed in drills 6" apart across the bed, dropping the seed 5 to 6 to the inch. Firm soil after covering, then water thoroughly. Keep beds moist but not soaking wet. Seed germinates 3 to 8 days depending on temperature. Transplant to open ground when plants have made fourth pair of leaves. Space 12" x 24". Use plenty of good commercial fertilizer. Cultivate frequently, every 5 or 6 days until cabbages are large.

Yellows Resistant Varieties

Yellows Resistant Marion Market—Large, firm round heads, used for early kraut. A development from Copenhagen Market. 7-in., 4-lb. heads. 75 to 80 days.

Yellows Resistant Wisconsin Hollander—Late, excellent for winter storage and kraut. Similar to Hollander and Danish Ball Head. 7 to 8-in., 7 to 9-lb. heads. 100 to 110 days.

Standard Early Varieties

Copenhagen Market—Excellent, early short season type. Short stems, 6½-in., 3½ to 4-lb. heads. 65 to 70 days.

Golden Acre—Extra early variety producing uniform well-balanced head. Weighs about 3 lbs. Excellent quality. 65 days.

PICK BEANS YOUNG FOR CHOICE EATING

It pays a home gardener to know some facts about this nutritious food crop, which yields more food for the space occupied than most other vegetables, and which he can eat at their most delicious stage, just before the seeds have begun to mature.

If pods are kept picked so that seed is never matured, the plants will continue to bear as long as they remain vigorous and green. So almost twice as large a yield can be enjoyed, if all pods are harvested when they are at their best, for cooking, canning or freezing.

All the old varieties of beans had stringy, fibrous growths running the whole length of the pods. These strong, tough strings were a

tedious job to remove, so plant breeders got busy many years ago, and began producing varieties of beans in which these "strings" were eliminated. The improved varieties were then called "stringless" beans, easy to break or "snap" into pieces—which accounts for this type of bean being called snap beans.

Pole beans are the heaviest yielders of the family. They are later in season and more tender to cold than bush beans. They should not be planted until the weather is settled and the ground warm. They must be provided with wire or cord to climb, and planted at least six inches apart. Be sure to enrich the soil for beans by applying at least four pounds of plant food for each 100 feet of row.

CABBAGE, Continued

Late or Winter Varieties

Danish Ball Head or Hollander—A widely used late type. Deep, round, hard, compact heads, 7 to 8-in., 6 to 7-lb. Tender, crisp, fine for kraut. 100 to 105 days.

Premium Late Flat Dutch—The best late variety. Large, round, flat solid heads of perfect shape. Less inclined to burst than many varieties. Tender; fine quality.

Red Variety

Mammoth Red Rock—Best of the red cabbages. Hard, round. Purplish-red heads. Good keeper, 6 to 8-in., 7 to 8 lb. heads. 100 days.

CHINESE CABBAGE

Must never be grown as a spring crop since it will only go to seed. Plant after June 15, as days are getting shorter, then it will head. An excellent succession crop to follow early peas.

Chihili or Improved Pekin—Dependable, early. Solid, tapered heads, 3 to 4-in. thick, 18 to 20-in. long. 75 days.

CARROTS

Use sandy loam enriched by manure the previous year, if possible; but any good land if deeply and well worked will produce a good crop. Sow seed as early as ground can be worked. Sow seed 1/2" to 1" deep in drills 16" to 18" apart. Press soil firmly above seed. When plants appear use cultivator or wheel hoe and thin from 2" to 6" apart, according to type. Keep cultivated.

Chantenay, Red Cored (fr)—Root has thick shoulder and tapers to slight stump root, 5-in. long. Red cored. 70 days to maturity.

Danvers Half Long—Sweet, tender roots, 6 to 7-in. long tapering to a blunt point. Fine for storing. 75 days.

Improved Imperator (fr)—Fine-grained, tender. Rich orange, indistinct core. Roots smooth, tapered to semi-blunt. Edible in 77 days.

Nantes Improved Coreless (fr)—Excellent for forcing. Tops small, roots bright orange, blunt ended. Flesh reddish orange and practically coreless. 70 days.

Oxheart or Guerande—Excellent for shallow soil, easy to harvest. Chunky, tender and sweet. Bright orange. Keeps well. 72 to 75 days.

CAULIFLOWER

Packet, 25c

Needs rich soil and abundant watering. Cultivate same as cabbage but protect heads from sunlight to insure the prized white curd. This is done by gathering leaves together loosely as soon as heads begin forming, and tying them well at the top.

Early Snowball(fr)—Best and most widely used early variety. Medium, firm compact heads of fine flavor. 6-7 inches in diameter. 55 days.

CELERIAC

Large Smooth Prague—(Turnip root-celery). Smooth spherical roots. 2 to 3-in. thick. 120 days.

CELERY

Start in shaded hotbed 60 days before needed. Cover seeds 1/4". Transplant when 6" high. In setting outdoors, don't get soil in or over crown. Set 7" to 12" apart. Soil must be rich, moist and loose. As soon as plants have grown to 14" to 15" tall, set 12" boards on both sides of row and hold in place with earth. Or 4" drain tile can be used to blanch individual stalks. Celery must have warm, settled weather: If chilled, plants are likely to go to seed. Keep soil well fertilized and moist. Crop matures in cool weather of autumn.

Giant Pascal—Late variety for winter use. Large plant, dark green leaves. Big solid stalks that blanch to yellow white. 135 days.



GOLDEN SELF BLANCHING

Golden Self Blanching, Dwarf—Compact plants, yellowish green foliage. Broad solid stalks, nutty flavor. Blanches readily. 120 days.

Wonderful or Golden Plume—Early, medium plant with compact, full heart. Blanches easily to golden yellow. 112 to 115 days.

COLLARDS

Sow seed heavily and transplant when 4" high, or sow in rows in permanent beds and thin to 16" to 18" apart when plants are well started.

Southern or Georgia—An excellent cooked green. Long stemmed plant, with clustered leaves. Withstands heat and bad soil. 24 to 36 days.

SWEET CORN

For the home gardener, the simplest way to plant sweet corn is in rows or drills, not in hills. Plant on north side of garden or so late summer shade from your corn does not retard growth of other nearby vegetables. Space the rows 36" apart, and plant a seed about every 3". Thin stalks to stand 9" to 12" apart in row. The drill should be 3" to 4" deep, but don't cover seed with more than 1" of soil. The drill or furrow can be filled in as the plants grow to anchor them against the wind.

In hills, plant 4 to 6 grains per hill. Later thin to 2 or 3 stalks to a hill. Space several plantings at intervals of 14 days for continuous crop.

Removing suckers has been standard practice with practically all growers. Now, experiments prove that removing suckers merely takes away extra food-producing leaves and so hurts rather than helps growth. Also, suckering often disturbs roots enough to injure plant. Always plant corn in several short rows side by side rather than one long row. Corn is pollinated by wind and rows side-by-side mean that all the stalks can be reached by the pollen. Many home gardeners, on reading newspaper accounts of corn de-tasseling, assume that this is necessary to set ears. On the contrary, removing tassels may cut the crop seriously. Detasseling is only done where hybrid corn is raised for seed purposes. The more pollen that flies, the better the set of kernels. So don't detassel sweet corn in the home garden. If weeds are under control, stop cultivating. If weeds are bad late in the season, work the soil as shallow as possible to avoid injuring surface feeder roots.

Hybrids

We offer Hybrid Sweet Corn varieties known as the best for your garden—the finest that can be procured anywhere. We list here only a few of these choice kinds. Whatever your needs or your preference, be sure we can supply you with the kind of corn you want. Talk it over with us.

Golden Cross Bantam (fr)—Extremely uniform. Ears 10 to 14 rows, slightly lighter yellow than Golden Bantam. Highly resistant to Stewart's disease. 85 days.

Ioana (fr)—1940 All-America. Ears 7 1/2 to 8-in., well-filled with 12 or 14 rows of deep, medium narrow, light yellow kernels. Highly resistant to drought and bacteria wilt. 87 days.

Marcross (fr)—An early wilt-resistant hybrid, producing deep golden yellow kernels 7 days earlier than Golden Bantam. Ears 6 to 7-in. long, with 12-14 rows of large sweet kernels. 73 days to maturity.

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SOIL TOO HEAVY IF CARROTS "CORKSCREW"

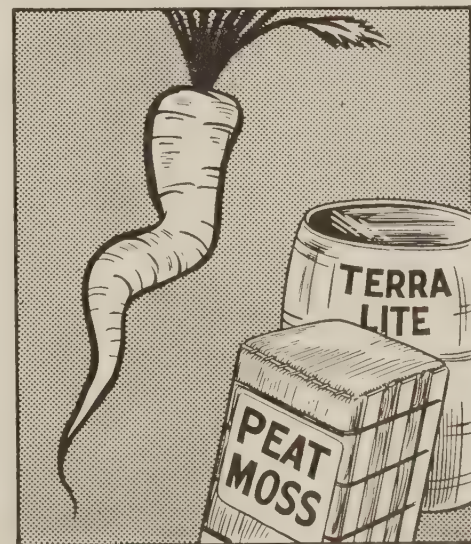
Heavy, clay soils because of their density resist the downward growth of long, slender rooted vegetables. For instance, Imperator Carrots and Icicle Radishes will twist and bend to follow the lines of least resistance to growth in heavy soil. This unusual appearance is called "Corkscrewing" and it visually indicates lack of soil porosity and humus.

Sand added to heavy soil will assist in relieving density but it should be accompanied with peat moss or one of the new Vermiculite materials. Vermiculite is a sterile type of rock which has been heated and caused

to explode into a highly absorbent substance that is about the size of gravel.

Peat moss is a selected, organic material formed years ago by the growth and decay of various aquatic plants. It, too, relieves soil density as well as supplying organic material and contributing to the formation of humus. It also binds and increases moisture holding capacity in sandy soil and acts as a reservoir for soluble plant food.

Both Vermiculite and peat moss absorb moisture during wet periods and hold it for the plant roots when they need it during dry weather.



SWEET CORN—Continued

Stowell's Hybrid Evergreen—White. Large ears about 8-in. long; big kernels, very sweet. One of the best late varieties. 95 days.

Open-Pollinated

Bantam Evergreen—A cross of Golden Bantam on Stowell's Evergreen. 14 to 18 rows. Deep, rich golden kernels, tender, sweet. 90 days.

Black Mexican—Pure white corn with purplish-blackseed. Ears are 7 to 8-in. long, 8 straight rows. 88 days.

Country Gentleman or Shoe Peg (fr)—Prolific late variety. Favored by canners. Irregular kernels, very deep, sweet. 93 days.

Golden Bantam (fr)—The best and most favorably known of all the yellow varieties. Stalks often have 2 ears. Ears 8 rowed, kernels broad, with tender hull.

Stowell's Evergreen — White. Large ears about 8" long. Big kernels. Very sweet. Good late variety. 93 days.

POP CORN

South American or Yellow Dynamite—Rich, creamy, yellow, smooth and round kernels, which pop double size of others. Ears 8 to 9-in. long. Vigorous grower. 115 days.

Hybrid Pop Corn

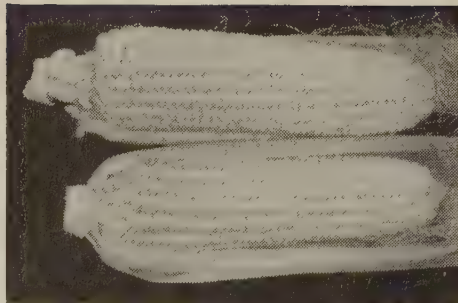
You will be delighted with hybrid pop corn. Yields are terrific; every plant produces corn with satisfying, big ears, with uniform popping ability. ASK US ABOUT THESE HYBRIDS!

CUCUMBER

Select soil fully exposed to sun and enrich thoroughly with fertilizer. Sandy soils with plenty of compost are best. Roots have difficulty on heavy soils. Plant 8 to 10 seeds in a "hill." Plant each hill about 36" apart. Cucumber vines like to stretch out, so plant rows about 4 feet apart. The old tale that melons or squash will cross pollinize with cucumbers and affect their taste if planted nearby is untrue. When vine is 6" long, thin to three strongest plants. Keep fruits picked to promote continuous fruiting. Use plenty of moisture; cucumbers are 90 per cent water.

A and C—A long dark green cucumber which merits a trial. Uniform, nearly cylindrical, rounded at ends.

Cubit—Won Bronze Medal Award in 1944. All-America Selections. Dark



STOWELL'S EVERGREEN

green, white spine cylindrical with blunt ends. Firm flesh and uniform coloring. New and worthwhile.

Davis Perfect—Midseason. 9 to 10-in. long, tapered, good color. 68 days.

Early Fortune — Rich, dark green fruits with firm, crisp, pure white flesh. Grows to 9 by 2½-in. Ships well and is highly resistant to disease. Edible in 66 days.

Long Green Improved—Black spined, good pickling. Grows 10 to 15 in. long. Matures in 70 days.

Marketer—Fine new variety, very prolific. Attractive rich, dark green color, carried right down to blossom end. Crisp, icy-white flesh. 7¾-in. long 2¾-in. diameter.

National Pickling—Rich dark green. Straight and rather blunt at ends but not chunky. Best all-around pickler. Edible in 55 days.

Straight Eight—Unsurpassed as slicing cucumber. **All-American Selection.** 2½-lb. fruits, rounded at ends, medium green. 68 days.

EGGPLANT

Requires continuous warm weather for best results. Seed should be started in a hotbed, as it is slow to germinate. Set plants in open ground when 2" tall and protect from hot sun when young. Be sure to keep young plants developing rapidly. Cultivate freely. To produce large fruits, remove lateral branches so as to reduce number of fruits per plant. Spray to protect from potato bugs.

Black Beauty (fr)—Large, egg-shaped, smooth, very dark purple fruits. Plant bears 4 to 5 fruits. Early.

New Hampshire Hybrid—Developed for short season areas. Round to olive shape fruits, growing low on the bush.

ENDIVE

Strictly a cool-weather crop: gets bitter at temperatures much above 80 degrees. Even moderately warm weather causes the plants to produce seed stalks. Plant very early. For late fall, sow early in middle autumn. Use last planting as late fall salad crop, and store surplus in cold frame or cellar by digging each plant with ball of soil. Plant in shallow drills with rows spaced 18" apart. When 4 inches tall, thin out to stand 6 inches to a foot apart. To blanch gather the outer leaves together and tie with soft twine or raffia. Do this when plant is nearly grown. Strings should be untied after a rain to permit leaves to dry and avoid rotting.

Full Heart or Escarole—A strongly bunched mass of thick, slightly crumpled leaves, well blanched heart. Upright growing plant about 12 inches in diameter. 71 days.

Green Curled Ruffec—Plants 16 to 18-in. in diameter. Fine fall variety. White, tender, fleshy. 95 days.

HERBS

(Aromatic, Medicinal and Kitchen)
Every garden has a place for herbs in the vegetable garden or for their ornamental appearance in the flower garden.

Anise—An annual—used for garnishing, seasoning and for cordials. Seeds have an aromatic flavor. Plants 14". Matures in 75 days.

Basil—Sweet — Annual; Ht. 12" to 18". Leaves, green or dried, are chiefly used as a seasoning for soups, stews, etc. 85 days.

Borage—Annual; Ht. 12-18". Young tender leaves are used as salad and also used to flavor lemonade and other cooling drinks. 80 days.

Caraway—Biennial; Ht. 18-24". Seeds used for flavoring. Young leaves and shoots used for flavoring salads. 70 days to maturity.

Coriander—Annual; Ht. 24-30". Seeds used for flavoring and in candy and to mask taste of medicine. 75 days.

Chives—Perennial; Ht. 6". Tops, finely chopped for adding mild onion flavor to soups, stews, salads, etc. 80 days to maturity.

Dill—Annual; 2' to 3'. Seeds and leaves used for flavoring—especially for dill pickles. 70 days.

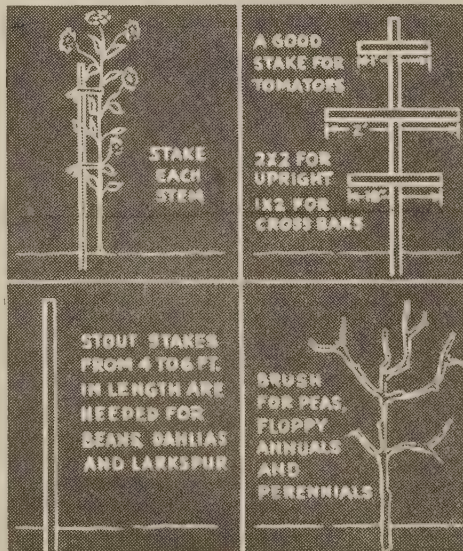
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STAKING PROTECTS . . .

Properly staked plants insure an orderly garden. Lack of proper staking means that you are reasonably sure to have some wrecked and messy beds later in the season. A heavy rain or wind storm is likely to knock over tall and heavy foliage plants which naturally have stems not sufficiently sturdy to stand up under such circumstances.

Careful tests have shown that on a given ground area more tomatoes can be grown on plants pruned to a single stem and tied to a stake or fence, than in any other way. They ripen earlier, too, and in many ways this method is best for the small vegetable garden.

Keeping tomato plants pruned and tied needs constant attention. At the joint where each leaf grows on the main stem, a branch will develop, and this must be cut or pinched



. . . INCREASES YIELD

off before it is four inches long, otherwise its removal may weaken the plant.

Delphiniums are the first plants in the garden to show the need for staking. The heavy spikes of bloom on these stately perennials make them singularly susceptible to destruction by winds or heavy rains. Stake them before the buds start to open.

Gladiolus with heavy spikes of bloom are likely to need stakes. Lilies and iris of the taller types also need this assistance. Tall African and French marigolds are tipped over by wind or rain and become a jungle. Staking would have saved them.

The first requisite of good staking is that the stakes should be strong and capable of holding up the plant, but as unobtrusive as possible. Green painted stakes are least conspicuous.

HERBS, Continued

Fennel, Sweet—Biennial; Ht. 2' to 4'. Leaves are used for garnishing, fresh stems tender, eaten raw like celery or in salads. Seeds used for flavoring. 60 days to mature.

Margoram, Sweet—Annual; Ht. 1' to 2'. Used for seasoning either fresh or dried. 70 days.

Rosemary—Perennial used as annual; 2' to 4'. Fragrant odor and warm, pungent taste, acceptable seasoning.

Sage—Perennial; Ht. 14" to 16". Used for seasoning either fresh or dried. Matures in 75 days.

Thyme—Perennial; Ht. 8" to 12". Aromatic foliage used as seasoning. 85 days to maturity.

KALE OR BORECOLE

Early fall or spring sowing. Either in rows or broadcast. To produce large plants have rows 2' apart and thin to 2" in rows. Leaves are best after coming of cool weather in fall.

Dwarf Blue Curled Scotch — Wide spreading, fine curled blue-green plant plume-like leaves. Use as a vegetable and for ornament. Exceptionally uniform. 55 days.

KOHLRABI

Sow seed in early spring or fall and when well established thin to 6" apart in the row. Even better to start it in beds and transplant same as cabbage. Planting at intervals of 10 days gives tender bulbs until hot weather. Must be used when young. Woody when old.

White Vienna Early (fr)—8 to 10-in. leaves on slender stems. Bulbs 2 to 3-in., globular light green. Crisp, tender, clear white flesh. 55 to 60 days.

LEEK

Large American Flag—An early, popular variety, with thick, long white stems, leaves large and drooping, medium green. 130 days.

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WHAT THE GREAT SAY...

George Washington's notebooks are replete with observations to improve his gardens and farms. "I know of no pursuit in which more real and important services can be rendered to any country than by improving its agriculture," he states. On soil fertility, conservation, and crop rotation, George Washington's observations are as fresh as though written yesterday.

Poets and militarists alike all through the ages have recognized the importance of gardening and the healthful outdoor life it affords.

When you have a garden

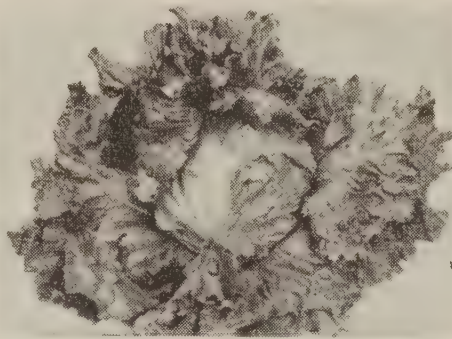
You have a future

And when you have a future

You are alive.—Frances Hodgson Burnett

God Almighty first planted a garden. And, indeed, it is the purest of human pleasures.

—Francis Bacon



IMPERIAL No. 847

LETTUCE

Keep lettuce growing rapidly for best results. A light, rich soil needed for this. Earliest varieties must be started from seed in cold-frame. As soon as open ground can be worked, transplant. For later use, sow seed in open ground as soon as weather is favorable. Thin plants in rows 4" to 8" depending on variety.

Remember that lettuce is a fast-growing, rich feeding crop. Give it plenty of water. And use your compost or well-rotted manure liberally on the lettuce row. A light sprinkling of nitrate of soda will pay, too, because lettuce thrives on lots of nitrogen.

Heading or Cabbage

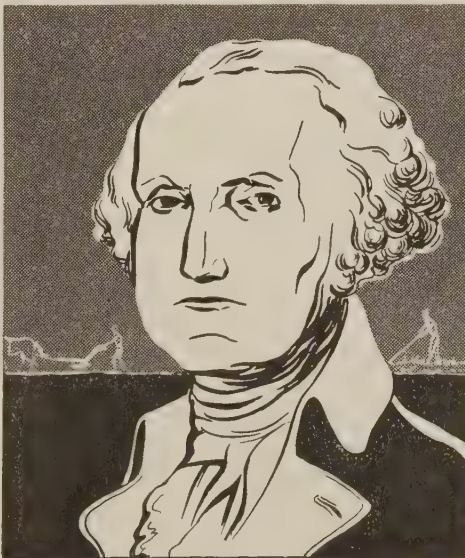
Bibb—Early, small headed lettuce of excellent quality and flavor. Perfect for home gardens. Very smooth, dark green leaves, bleaching to yellow.

Big Boston or Mammoth Boston—Popular for cold frame forcing and outside culture. Medium, compact, heads with creamy yellow heart. Smooth, glossy leaves, edges wavy, and slightly tinged with reddish brown. 75 days.

Great Lakes—All-America award. An outstanding new Iceberg or Crisp-head type. A summer lettuce that stands heat well and is very resistant to tip burn. Heads medium, solid.

Iceberg—Late, large variety. Compact heads, crumpled, crisp and sweet. Leaves light green, slightly brown on edges. 85 days.

Imperial No. 847 (Florida Iceberg)—Heads are of good size and solid.



Does well in hot weather, and is resistant to tip burn. Hardy. 83 days.

New York No. 12—The standard crisp-head lettuce. Large globular shaped head, dark green with blanching, silvery white heart. Successfully grown outdoors spring, summer and fall. Edible in 85 days.

White Paris Cos or Trianon—Medium large self-folding, dark green loaf shaped heads. Greenish-white, well blanched interior. 66 days.

Loose Leaf Varieties

Black Seeded Simpson—Light green, frilled and crumpled. 45 days.

Grand Rapids—Erect, compact plants. Light green, broad heavily fringed. For forcing or early planting. 43 days to maturity.

Oak Leaf—The most popular leaf lettuce for home gardens. Rich, dark green leaves, tender and delicious. Fine resistance to hot weather.

Prizehead — Early non-heading sort. Medium sized plants, crisp and tender. Color light brown on a medium green base. Leaves frilled at edges, and crumpled. 47 days.

MANGEL WURZEL

(SEE BEETS, STOCK)

MELONS**MUSKMELON AND CANTALOUPE**

Easily injured by cool weather. Before planting, spade liberal forkful of well rotted manure into each hill. Plant 8 to 10 seeds to a hill. Thin plants to four per hill after third leaf develops, and train vines in different directions. On moist ground, use shingles to hold melons off ground to prevent rotting. If grown in cool weather or where nights are cold, will not bear well and melons will have poor flavor.

Bender's Surprise — Similar to Tip Top. Coarse netted 7-lb., oblong fruit, distinctly ribbed hard greenish-yellow skin. Flesh bright salmon. 95 days to maturity.

Hale's Best—Flesh thick, deep salmon-pink, sweet and tasty. Heavily netted rind, with faint stripe. Small seed cavity. Outstanding variety, resistant to powdery mildew. 4 lbs. 86 days.

Continued on Next Page

ABOUT TILLING THE SOIL

A farm, however large, is not more difficult to direct than a garden, and does not call for more attention or skill.—Thomas Jefferson.

I am glad to reflect how much more delightful to an undebauched mind is the task of making improvements on the earth than all the vainglory which can be acquired from ravaging it by the most uninterrupted career of conquests.—George Washington.

You can't forget a garden

When you have planted seed.

When you have watched the weather

And know a rose's need.—Louise Driscoll

Oh Adam was a gardener and God who made him sees

That half a proper gardener's work is done upon his knees.—Kipling.

As for the leaves that in the garden bloom My love for them is great, as is the good

Dealt by the eternal hand, that tends them all.—Dante.

MELONS, Continued

Hearts of Gold or Improved Hoodoo—Nearly round 2-lb. fruit, distinctly ribbed, deep green with fine grey netting. Thick, deep salmon flesh, tender sweet. Edible in 94 days.

Honey Rock or Sugar Rock—Round, 4-lb. fruit. Gray-green skin, coarse, sparse netting. Orange-salmon, thick flesh, fine flavor. 85 days.

Pride of Wisconsin—Small seed cavity and thick, orange flesh, excellent flavor. Matures early. Large size. A new melon which is deservedly becoming a leader. 92 days.

Rocky Ford—Fruits small with rather large red cavities. Nearly round. 2½ lbs. No ribs. Flesh thick and green with golden tinge at center. Very juicy and spicy. Excellent quality. 92 days to maturity.

WATERMELON

Requires about same culture as muskmelon, except the vines need more room. Fertilize each hill liberally and cultivate thoroughly.

Cole's Early—An early variety for the North. Medium size fruit, short oval with alternate dark and light green stripes. Pink-red flesh, black seeds and tender rind. 75 days.

Dixie Queen—Very prolific. Bright red, crisp, splendid quality fibreless flesh. Few small, white seeds. 85 days.

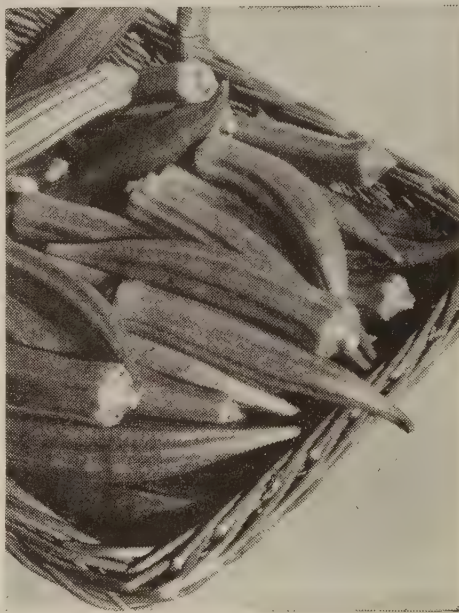
Kleckley's Sweet or Wondermelon—Large, cylindrical, dark bluish-green, with thin, tender rind. Bright red, juicy, sweet flesh, creamy-white seeds with traces of brown. 85 days.

Stone Mountain—Also called Dixie Belle. High quality shipping variety. Fruits very large, oval-round, blunt ends. Dark green, tough rind. Flesh rich scarlet, fine grained, sweet. Seed white with black tips. 90 days.

Tom Watson—Red heart strain. Large fruit, uniform cylindrical, with tough elastic rind, faintly veined. 90 days.

MUSTARD

Sow as early as possible in the spring. Keep rows 6" to 12" apart and cover with soil ½" deep. You may also sow seed in autumn to raise greens, and for salads.



OKRA

Fordhook Fancy—Upright growing, mild variety. Bright green leaves, plume-like and deeply fringed on the edges. 50 days.

Southern Giant Curled—Large, frilled and crumpled. Light green leaves. 35 days to maturity.

OKRA OR GUMBO

Sow in rows about 3" apart. Cover seeds with about 1" of fine soil firmly pressed down. Thin plants 18" to 24" apart when they reach 3" growth. Do not plant until ground is warm, as this is a tender, hot weather plant. Pick before woody fibres develop.

Dwarf Green—Early, prolific dwarf growing sort. Dark green fluted, 5 to 7-in. pointed pods. Most desirable, compact growing okra. 50 days.

Perkin's Mammoth Long Pod—Early and prolific. Very tender, long pods. Deep green and slightly corrugated. Edible in 68 days.

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ONIONS

Plant as soon as soil can be prepared. For best yield, plant on very fertile land—fall plowed, and thoroughly fertilized. When plants are a few inches tall, thin to prevent crowding—using the plants removed as green onions. Leave 4" apart for globe-types and 6" for the big Spanish types to mature for dry onions. Latter can also be started indoors for largest bulbs and can be set out 6" apart after frost danger has passed. All onions need liberal feeding and watering. Those left to become fully ripe can be stored for winter. Cultivate and hand weed every two weeks in summer.

Yellow Varieties

Yellow Sweet Spanish—Large, globe-shaped, exceptionally mild and sweet—excellent for eating raw or boiled. Light yellow skin and pure white, firm, crisp, and tasty flesh. 112 days.

Yellow Globe Danvers—An oval shaped straw-colored onion. White flesh, crisp and mild. Splendid keeper. Matures in 110 days.

White Varieties

Southport White Globe—Best of the whites. Medium-sized, round, solid white bulbs, fine thin skin. Waxy white flesh, mild and fine grained. Keeps well in fall. 110 to 112 days.

White Bunching—A good Spring appetizer. Crisp and mild. Fine for cooking when grown larger. 60 days.

White Portugal or Silverskin—Excellent flat variety. Dependable cropper, excellent for sets, for green bunching, or as a pickler. 100 to 102 days.

Red Varieties

Southport Red Globe—Finest of all red onions. Perfectly round, good sized bulbs with thick, small necks. Skin is deep purplish-red. Strong flavored flesh, white tinged with pink. Good keeper, productive. 112-114 days to maturity.

ONION PLANTS

Sturdy, hardy plants that come to you all ready to set out. Ask for prices.

ONION SETS

Onion sets used instead of seeds will produce earlier crops of green onions or large bulbs. Plant seeds right side up and cover with garden rake; then firm the soil well over the sets.

Red, White, Yellow

THESE GREENS HELP WIN FAME FOR YOUR SALADS

Home gardeners have a wonderful opportunity to enjoy tasteful, tempting salads all summer long.

The kind of lettuce you can grow at home—really crisp, fresh leaf lettuce—is the kind every master chef sighs for and can't get. As soon as your soil is workable, plant a row of black Seeded Simpson, or Oak Leaf. Or if you like head lettuce, try Big Boston, a butter-head full-flavored kind you can't buy on the market.

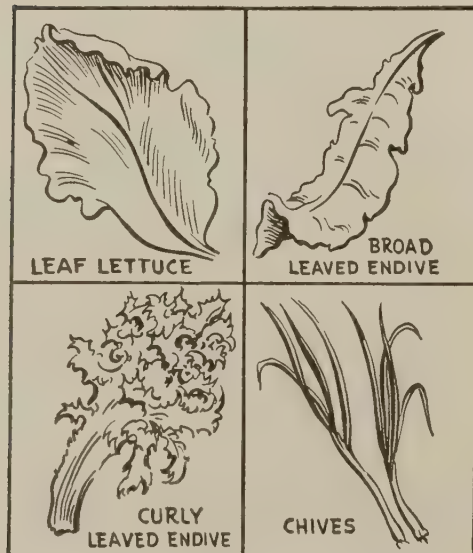
Hot weather is hard on most lettuce, but try Great Lakes: you'll be surprised how well it grows and how slowly it bolts to seed. And you'll be delighted with its good crisp head lettuce flavor.

For a real treat, try Oak Leaf. It combines

the wonderful flavor and quality of leaf lettuce with the productivity and crispness of head lettuce. If allowed to stand, it produces loose heads.

Endive comes in two types, broad and curly leaved. Both have a distinctive flavor. They stand both hot weather and frost. A late sowing should always be made to mature in the fall, when frost improves the flavor.

Chives is a most useful salad vegetable. It is a cousin of the onion of which the leaves are used. They have a delicate onion flavor, just enough to season the salad. Chives grow from seed easily, and a plant lives many years. It bears an attractive lavender flower and is often used as a border along the garden path.



1950 GOLD MEDAL WINNER

SQUASH, Uconn

1950 GOLD MEDAL WINNER

BEAN, Topcrop



TOMATOES, Rutgers



HOME GARDENING GUIDE



SAVE YOUR GARDEN ANNUAL FOR FUTURE USE

On this and succeeding pages of our Garden Annual is the "Home Gardening Guide"—a wealth of information to the beginning gardener as well as the veteran. Here you will find practical everyday facts that will give you a good foundation to better gardening of vegetables and flowers. You can easily recognize these guide posts by the red head at the top of the page.

Keep your Garden Annual handy. We have planned it to give you information the year round. If you have an unanswered question after consulting the Home Gardening Guide, **come in and ask us personally.** We have a wealth of information and experience in local planting problems—it's your's for the asking.

On Planning Your Garden

No one can fully plan your garden for you, because garden planning is a highly personal, individual matter. Give your own ideas and desires plenty of play—and you'll enjoy your garden more. There are certain absolutely basic facts that apply to all home garden planning.

1—Divide the garden into three sections if possible, (1) Root vegetables, (2) Leaf vegetables, and (3) Fruit vegetables. By switching these three groups every year you avoid many soil-borne diseases and insects and get better use of fertilizers. This isn't absolutely necessary, but it is one of those details that the smart gardener watches.

2—On level ground, you can run either east and west or north and south. If east-and-west layout is used, be sure to plant taller vegetables to the north. **On sloping**

ground, the rows must run across the slope, not up and down. Otherwise all your plant food and much of your topsoil will go down the hill when it rains.

3—Plan to grow enough vegetables for storing and canning. Remember that correct storage begins with planting so provide for this when planning your garden and ordering seed.

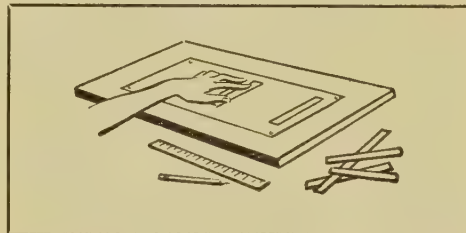
4—In smaller gardens, don't plant space-wasting crops like Potatoes, Pumpkins, Sweet Corn and Vine Squash. On the farm these can be grown with the field crops, saving the more highly cultivated garden space for the more productive vegetables that need closer attention. **Many gardeners report that Zucchini and other bush squashes gave better results than Eggplant and satisfied many of the requirements for vining Squashes.**

5—Include perennial vegetables when possible. Rhubarb, Asparagus, Horse Radish

and Perennial Onions can be grown on one side of the garden where they won't interfere with plowing or cultivating. Small fruits should be included whenever space will permit, since the quality of home-grown berries is far better than any you can buy.

6—Avoid growing vegetables your family doesn't like and won't eat, but be sure to include plenty of those they do like. If they're fond of beans, for instance, don't be satisfied with a single large planting, but make several smaller plantings at two weeks intervals.

Plan it on Paper First



Study the charts on pages 22 and 23. They will tell how far apart rows should be, how long each crop takes to mature, and how much space you will need to provide the vegetables your family likes. After you have taken into consideration the crops you want to grow, make a rough sketch showing the location of each crop, with catch crops, intercrops, succession crops indicated.



PARSLEY

Does best in rich, mellow loam. Seed is slow to germinate, and is helped by soaking in warm water overnight before planting. Sow early and not too deeply. Space plants 6" apart. When curled varieties are about 3" tall, cut off leaves. The new growth will be brighter and curlier.

Moss Curled or Triple Curled—Compact, dark green leaves, curled and fine-cut. 70 days.

PARSNIP

Needs rich, mellow soil for best growth. Must be planted as early as ground can be worked. Soil must be loose to a depth of 12" and cannot be heavy. Rows should be 15" to 18" apart. Cover seed 1/2" and press down soil. Thin out to 4" when plants have made a good start. Cold weather turns starches into sugar and improves flavor. Roots are hardy: leave in ground over winter if desired.

Hollow Crown (fr)—The most generally grown kind. Roots 2 1/2 to 3-in. thick at shoulder. 12 to 14-in. long, uniformly tapered, hollow crowned. Edible in 95 days.

PEAS

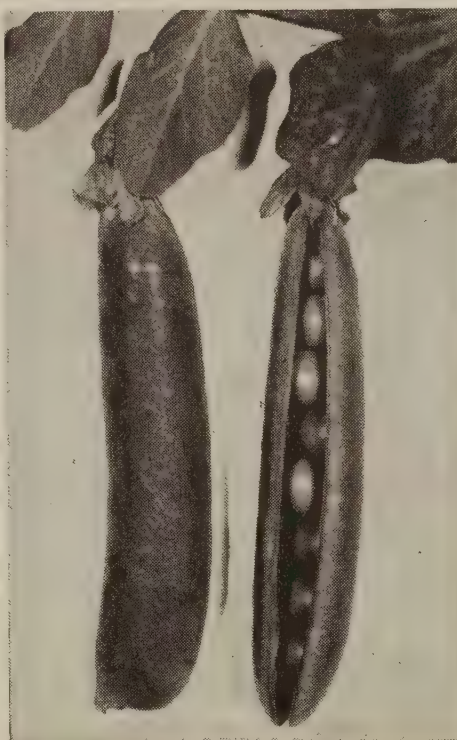
Early peas need a light, warm soil; but general crop thrives best in moderately heavy soil. (Avoid fresh manure and very rich or wet, mucky soil as this produces large growth of vine at the cost of quality of the peas.) Plant seed in rows at 2" depth. Keep rows 21" to 28" apart for dwarf varieties and 28" to 42" for it is fit to use or new pods will cease to form and those partly advanced will cease growth.

Plant variety *Alaska* as soon as ground can be dug. Plant wrinkled varieties (which have better flavor) when narcissus buds show color or when crocuses are in bloom. Peas are not satisfactory when weather turns hot. Tall varieties must be staked. Most home gardeners prefer dwarf varieties like *Little Marvel*. Peas want well-limed soil. Don't forget, inoculation improves production.

Early and Second Variety

Alaska—Wilt resistant. Used for canning and early home garden. Blunt, straight light-green. 3-in pods. Plants 32-in. 69 days.

Laxton's Progress (fr)—Medium dark green vine, 16 to 18-in. Single pods almost an inch wide and 4 1/2 to 5-in. long, with 7 to 9 large peas. 62 days.



THOMAS LAXTON

FREEZONIAN PEA

All America Bronze Medal Winner of 1948. 63 days. Luscious, melting peas that retain their garden fresh sweet flavor after freezing. The vigorous two and a half feet wilt resistant vines bear an excellent crop of 3 1/2 inch pods well packed with 8 or 9 medium sized peas. Pkt. 15c.

Little Marvel (fr) — Outstanding, dwarf. Fine quality, large yield. Single and double, dark green, 3-in. pods—blunt, plump, well filled with 7 to 8 medium sized, light green tender peas. Edible in 62 days.

Thomas Laxton (fr)—Medium height. Strong vine bears numerous dark green, blunt ended pods, 4 to 4 1/2-in. Retains flavor and sweetness. One of earliest. 57 days.

Later Varieties

Alderman or Dark-Podded Telephone (fr)—Large podded variety of the Telephone family. Excellent for home gardens, truckers, shipping to distant markets and for freezing; resistant to Fusarium wilt. Vine dark green, coarse. Pods single, very broad, plump, straight, dark green, pointed; contains 8 to 10 peas of highest quality. Seed large, wrinkled, light green. 74 days.

Hundredfold or Laxtonian — Exceptionally choice and prolific. Dark green. Rather coarse vines. Straight pointed, well-filled 2 1/2" pods. 62 days.

Edible Podded or Sugar

Mammoth Melting Sugar—Wilt resistant. Coarse light-green vine, 54-in. Single 4 1/2-in. pods, broad, indented light, blunt, stringless, without fiber, fleshy. Contains 7 peas. Seed large, round, creamy-white. 74 days.

PEPPERS

Need long growing season; start indoors 8 weeks before plants are wanted. Set plants 15" x 24" and feed liberally for bigger fruits.

Warm, mellow soil in sheltered location is best. Cultivate regularly, drawing soil up around stems. When plants are 7" to 8" tall, hoe in light dressing of commercial fertilizer. Do not plant hot peppers near sweet; they are apt to cross.

Sweet

California Wonder Improved—Number one quality peppers, about 4-in. long and 3 1/2-in. diameter, very smooth, 3 and 4 lobed, glossy green, turning bright crimson when ripe. Remarkably thick walls, tender, sweet. 75 days to maturity.

Pimento or Perfection—Best of the medium sized sweet peppers. Excellent for stuffing. Smooth, heart-shaped, about 3-in. long. 125 days.

Ruby King — All-America, bred for size and uniformity. Dark green turning to bright deep red fruit. Thick flesh sweet and mild. 60 days.

World Beater—One of the best large peppers. Glossy-green, changes to bright red. Mild, very sweet, thick flesh. 75 days.

Continued on Next Page



CHILDREN'S GARDEN EDUCATIONAL

(Patience Saving)

Children are natural born garden lovers and with just a little help and guidance from you this spring they can enjoy the thrill of their own garden.

Having a garden of their own will not only teach children how to take care of things, but will give them a greater appreciation of Nature, when they watch the cycle of seed to tiny green shoot to flower or vegetable.

When you are cultivating your family garden this spring, set aside a special plot for the children. Pick a well drained, sunny location near your own garden. A plot eight or ten feet square is adequate.

When choosing flowers for their garden, think first of annuals, as they are fast growing, long lasting and don't require much special work. A good selection might include Marigolds, Zinnias, Nasturtiums, Cosmos and Bachelor Buttons.

For their vegetables, they can have a bountiful garden with Beans, Beets, Carrots, Leaf Lettuce, Radishes and Parsley.

By choosing such fast growing flowers and vegetables, you'll find that the children's interest won't lag—nor their appetites, when they see THEIR vegetables on the table!

PEPPERS, Continued

Hot

Hungarian Wax—Slender, waxy yellow fruit about 6-in. long turns red when ripe. Very hot. 65 days.

Long Red Cayenne—The hot favorite. For canning, pickling, drying. Pungent flavored fruit, tapering and twisted. Matures in 70 days.

PUMPKIN

Plant in middle of spring among corn; or in hills 8' apart each way. Drop 4 seeds to a hill. If planted in hills, cultivate the same as melons and cucumbers. For winter use gather before frost (leave stem 3" to 4" long) and store in warm, dry place.

Connecticut Field—Large fruit with flat ends, 15 to 25-lbs. and up to 15-in. Surface, slightly ribbed, deep orange. Thick flesh, orange-yellow, sweet and coarse. 118 days.

King of the Mammoth—Largest of all pumpkins. Valuable for stock feeding and exhibition. Globular, slightly ribbed, flattened, weigh 60 to 90-lb. Flesh solid, yellow-orange, coarse, but good quality. 120 days.



FRENCH BREAKFAST

Crimson Giant—Large round, 1 to 1½-in. Deep crimson roots. Very crisp and tender for its size. 28 days.

Early Scarlet Globe—Globular, slightly elongated, bright scarlet. 24 days.

Early Scarlet Turnip, White Tipped—Carmine red with white tip. Flesh white, crisp and mild. 26 days.

French Breakfast—Roots thicker toward bottom. 1½-in. long by ½ to ¾-in. Dull scarlet, white tipped. 25 days to maturity.

White Icicle—Tapering roots 5 to 5½-in., White, mild flesh. 27 days.

Fall and Winter Varieties

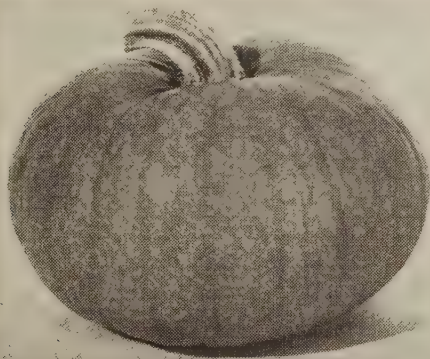
Celestial or Chinese White Winter—White flesh, rather mild in flavor. Roots large, 8" long and 2½ to 3 inches in diameter, cylindrical with heavy shoulder. 60 days.

Long Black Spanish—Good keeping winter variety. White, crisp and pungent. 8 to 9-in. long, slightly tapered. Edible in 58 days.

Round Black Spanish—Top-shaped. 3" to 4". Flesh white, crisp and of strong flavor. 56 days.

RUTABAGA

(SEE TURNIP)



Small Sugar or New England Pie—Desirable for pie or general use. Round, flat end fruit, deep orange. Thick, yellow-orange flesh. 118 days.

RADISH

Soil should be light, quick and rich to insure rapid growth. Slow growth makes the flavor too strong. Sow as early as ground can be worked, as radishes are very hardy. Make successive sowings up to hot weather. When in the third leaf, thin to give roots plenty of room. Pull promptly when mature. The secret of crisp, delicious radishes is quick growth, prompt picking.

SALSIFY

Light, rich soil best and it must be stirred to a considerable depth. Sow in rows 18" apart. Cover seeds firmly with ½" of fine soil and thin plants later to 2" to 3" apart in the row. Cultivate the same as carrots.

Mammoth Sandwich Island—A palatable and nutritious vegetable when cooked. Flavor is remarkably similar to oysters. 120 days.

SPINACH

Plant seed in very rich soil in rows spaced 14" to 18" apart. Keep plants thinned out from 3" to 6" apart in the row. (Seed may also be sown broadcast) Sown in fall for winter use and spring for early use.

Bloomsdale Savoy, Long Standing (fr)—A few days later than regular Bloomsdale Savoy. Holds from 12 to 14 days longer. 42 days.

Giant Nobel or Giant Thick Leaf—Large, vigorous, spreading plant, slow to form seed stalks. Heavy yielder. Large, thick, smooth, deep green leaves. 45 days.

New Zealand—Thrives in dry hot weather. Can be picked repeatedly all season. Not a true spinach, but similar when cooked. 70 days.

SQUASH

Follow same planting and culture as for melons and cucumbers. Plant summer varieties 6 or 8 seeds in hill 3' to 4' apart each way and winter squash 8' apart. Plants bear longer if squash is picked off as soon as it is ready for use.

Summer Varieties

Early Prolific Straightneck (fr)—Earlier, smaller, and more productive than Giant Summer Straightneck, and more uniform. Brilliant yellow. Fine for home or market. 50 days.

Giant Summer Crookneck—Prolific, bush type plant, curved neck fruits around 4 to 5-lb., 20 to 24-in. long. 4 to 5-in. diameter. 56 days.

Mammoth White Bush Scallop—3½" long, 9" in diameter. Retain their white color at later stages. 56 days to maturity.

Zucchini—Straight, cylindrical fruits, 3 to 4-lb., 3 to 5-in. through, 10 to 14-in. long. Mottled and striped green-creamy-gray. Delicate flavored flesh. 60 days.

(Continued on Page 17)

HERBS ADD SPICE TO GARDENING AND TABLE

Herbs are again becoming an important crop in the garden.

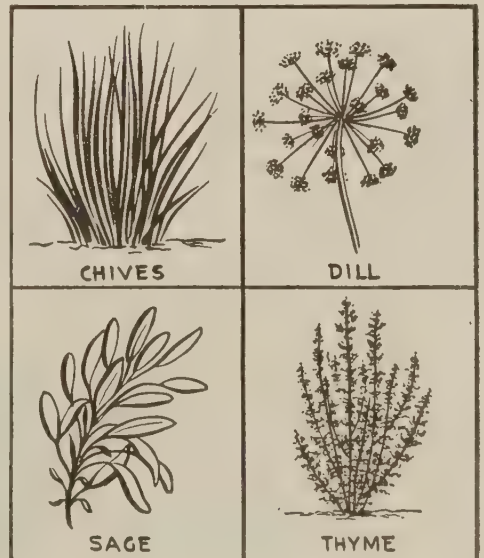
Originally they were grown because every home needed the flavorings, medicine, and perfume which the herb bed provided. Now that modern science has eliminated the necessity for these uses, the herbs are grown for beauty and choice flavorings.

When herbs were a necessity they were grown in beds or in a special garden. Herb gardens depended more on design for their effectiveness as most of the plants are green or grayish color with unattractive flowers. Some people are making small herb gardens or herb beds today.

Chives are an excellent low border plant. Attractive foliage is crowned with showy purple flowers in spring. The leaves are tasty in salads, cheese, and egg dishes. Sage is an interesting plant for the garden. The crinkled gray foliage is attractive, and the pale lavender flowers are interesting. The leaves are famous for use in dressings.

Basil, marjoram, thyme, and rosemary are pleasing as border plants, while parsley is superb for edgings.

Every garden has a place for several of the herbs, and many gardens can have interesting herb beds or gardens.



SAGE

THYME



CANTALOUPE, Hale's Best



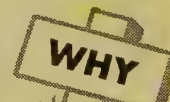
LETTUCE, Early Curled Simpson



ONION, (left) Southport White
Globe and Yellow Globe Danver



HOME GARDENING GUIDE



On Growing Seedlings

DON'T BEGIN too soon, unless you have a greenhouse or light hotbed and can give the seedlings plenty of room. For most vegetables, 6 to 7 weeks is time enough to allow between seeding and transplanting. Most homes are too dark, so don't try to grow seedlings unless you can do it in a sunny window that gets direct sunshine for at least six hours. Fill shallow boxes (flats) with a mixture of $\frac{1}{3}$ good garden soil, $\frac{1}{3}$ clean sand and $\frac{1}{3}$ compost, leaf mould or other well-rotted organic matter. Make very shallow rows of furrows with the edge of a ruler or a wood lath, 3" apart. Sow seeds in these rows 1" apart in the row. For most plants, a temperature of 70 degrees is a good compromise. DON'T let your soil dry out, and don't let it be soggy. Spray **lightly** two or three times a day, using an atomizer or bulb sprinkler. When the best seedlings can be selected, thin out to stand 2" to 3" apart. Before transplanting into the garden, withhold water for 2 or 3 days. In transplanting, set the plants firmly by pressing on both sides of the stem with forefinger and thumb. If not firmed thoroughly, seedling may be killed by being hung with an air space underneath.

Pointers on Transplanting

The value in transplanting vegetables is that it saves considerable time because the germination and young growth periods are skipped and your harvest can be made in a much shorter growing time. Transplanting causes considerable shock to the plant. The root disturbance and readjustment to its new environment can be minimized if the plants are carefully handled.

Always try to save as many leaves and roots as possible. It is better to allow the transplant to wilt slightly than to remove leaves. **Removing leaves slows up the manufacture of plant food that will help the plant recover.**

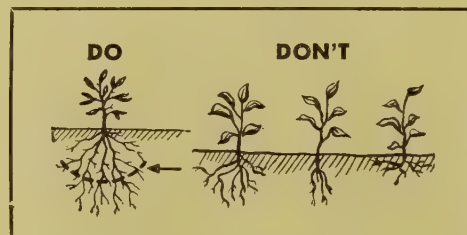
In selecting your seedlings remember they should be medium green in color, not too tall, and leaves should be free from spots or dead areas. Do not use seedlings that are red or purple in color, or show signs of yellowing except in the case of celery.

Tomato, eggplant, and pepper plants are tender and should not be set out before danger of frost is past. **Cabbage, cauliflower, and kohlrabi** are less tender but it is not safe to set them out much before the frost-proof date.

When soil is sufficiently moist so a ball of soil can be retained around each individual root there is less chance of injury

or of air pockets being left around roots. Use a trowel. **(It is important that roots be kept in close contact with soil so they can get moisture.)**

When seedlings are to be transplanted without a ball of soil, long tap roots should be shortened, and the whole root system placed and "firmed in" so that it is well spread out, not bunched. Soil in which roots are placed must be finely pulverized.



Transplant in cool, cloudy weather or at evening or early morning.

As soon as the garden has been planted, water thoroughly but gently with a fine spray. This, by the way, is the only time we **sprinkle** a garden; once the plants are established, any watering should give the soil a good soaking.

On pages 26 and 27 you will find methods of construction of seed boxes, hot beds and cold frames to handle your seedlings.

SQUASH, Early Prolific
Straightneck



CABBAGE, Golden Acre



CABBAGE, Danish Ballhead

SQUASH, Continued**Fall and Winter Varieties**

Butternut—Deep buff-colored, bottle-shaped fruits. Smooth, hard shell. Solid fine textured flesh, that is deep yellow, dry, sweet, with excellent flavor. 12-in. long, upper or neck section 3½-in. diameter. 85 days.

Golden Hubbard—An early, small variety. Fruits pointed at each end moderately warted. Dry, deep orange flesh of fine quality.

Improved Green Hubbard (fr)—Most widely grown of any winter squash. Round, warted, dark green with thick yellow flesh. Weight 12 to 14 lbs. 100 days.

Table Queen or Des Moines or Acorn (fr)—Acorn-shaped, green, deeply furrowed flesh rich yellow, dry, mealy, delicious. Convenient size for baking and serving in halves. 100 days.

UCONN SQUASH

All American Gold Medal Winner for 1950. A highly productive squash of the "Table Queen" or "Des Moines" type. Bushy plants, about three feet in diameter that do not have the rambling characteristics of most squashes. Here is an excellent keeper whose dark green shell holds a bowl of flavorful, golden flesh. About 5 inches in diameter when fully ripe. Pkt. 15c.

SWISS CHARD

(SEE BEETS, LEAF)



PONDEROSA

TOMATOES

Do best in sandy, well pulverized loam. Sow seed in hotbed or indoors. When plants are about 2" high, set out 3" apart, in boxes or pots—later transplant into the garden. Or keep in flats until weather is warm and settled, and then set plants out directly into the garden. Water around the roots of the plants when setting them out if ground is dry. Cultivate frequently until plants shade the ground. Remove all but the two or three strongest branches. Study methods of staking and training vines and adopt the one best suited to your situation.

Beefsteak — Rich scarlet-red, extra large fruits, more or less ribbed. Juicy, solid, with rich sub-acid flavor. One of the best for home use. 90 days to maturity.

Bonny Best—Second early variety, valuable for canners. Medium-vine, not very hardy. Medium-sized, apple-shaped, solid fruits, scarlet. 73 days.

Earliana—Open, spreading, medium small vines. Red fruits run to medium size. Thick; smooth fruit. 66 days.

John Baer—Thick, scarlet (similar to Bonny Best). Smooth, firm, medium large fruit. 70 days.

Jubilee—Orange colored fruit. Juicy with few seeds. Weighs about 6 oz. Bears over a long season. 72 days.

Marglobe — Moderately productive, with heavy foliage. Vigorous and resistant to wilt and rust. Fruits medium large, nearly round, smooth, and solid. Deep red. 77 days.

Oxheart—Plant open, spreading. Moderately productive. Fruits large, roughly heart shaped, pink, meaty and of mild flavor. 90 days.

Ponderosa—One of the largest varieties. Spreading large vines. Solid, fine flavored, pink, with small seed cells. Somewhat rough and flat. Have a tendency to crack. 88 days.

Pritchard's Scarlet Topper—Medium to large round, with thick, firm flesh and small seed cavities. Brilliant red throughout, coloring right to top, without hard green spots. Free from acidity, one of the best home canners. Early.

Rutgers—Second early variety. Large thick stems, vigorous foliage. Fruits similar to Marglobe but flatter at stem end. Bright red, with thick walls. Red, firm flesh, low acidity. 72 days.

Stokesdale—An extremely important development. Smooth 7-oz. fruit, brilliant color, exceedingly solid flesh and small seed cavities. Matures in the second-early group, a full week earlier than Marglobe.

Stone Improved — Medium late. Ripens evenly and is uniform. Fruits large, flattened but deep. Smooth, attractive, scarlet-red, of fine flavor. 86 days to maturity.

Valiant — Plant sparse and open. Fruits large for an early variety, globe shaped and of bright scarlet color.

Small Fruited—Red and yellow varieties, shaped like miniature pears, plums, and cherries; very attractive for preserves.

TURNIP

For summer greens or roots, sow as early as radishes and lettuce. Then cut when plants are 6" high. Sow again in summer for fall and winter use. Turnips do best when most of their growth is made in autumn or early spring. Should be grown rapidly for best flavor and for finest texture.

Golden Ball or Orange Jelly—Medium size, deep yellow with bronze-green top. Creamy yellow flesh of fine texture. 65 days.

Purple Top White Globe (fr)—Large, sweet tops. Smooth, globe-shaped roots, purple-red above, white below. Sweet tender, crisp, white flesh. 50 to 60 days.

Purple-Top Strap Leaf—Home and market garden variety. Deep purplish-red on top, white below. Flesh white and never stringy.

Foliage Turnip

Seven Top or Winter Greens—For greens or forage. Young shoots extremely tender. 50 days.

Rutabaga or Swede Turnip

American Purpletop—Hardy and productive. Tender firm, light yellow, sweet flesh. 88 days.

FEEDING IMPROVES QUALITY AND YIELD!

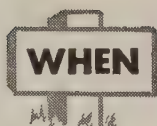
By feeding their vegetables adequately, home gardeners can not only enjoy increased yields, and higher quality, but can reduce substantially the work involved in gardening. Expense of feeding plants remains partially at its prewar figure.

To apply, stretch the line to mark the row in which seeds are to be planted. Then not less than two inches away on either side, make a furrow four inches deep. Pour plant food into each furrow at the rate of one pound (or pint)

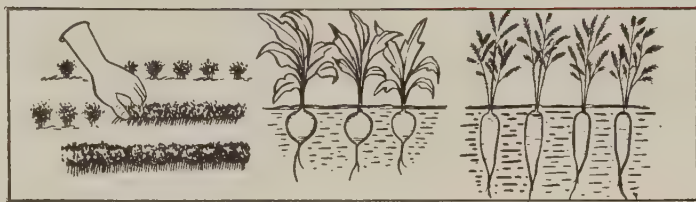
for 50 feet, and cover it with earth. Then make the drill in which seed are to be sown and proceed with planting as usual.

The standard application of a balanced plant food for evenly distributed area coverage is 4 pounds per 100 square feet (a space 10x10 feet square). You may figure one pound per pint, so an area 10 by 10 ft. requires two quarts. One quart will feed 50 square feet and one pint 25 square feet.





HOME GARDENING GUIDE



Steps in Thinning Plants

For best results, thinning should be done gradually. In case of a crop which grows best when the plants stand four inches apart, do not at first thin it to one plant for each four inches.

It is foolish to discard all excess plants prematurely when accidents, insects or disease may destroy many which are left. If thinning is done by stages as the plants grow, they will finally stand at the optimum distance from other, and there will be small chance of vacant spaces in the row.

Lettuce plants, thinned to stand an inch apart, will soon reach a size when alternate plants can be removed to make a salad; and this process may be continued until the spacing is right for the remaining plants to mature.

Carrots may be thinned the first time when they are thick as a pencil; and a dish of the thinnings will give those who have never eaten such tiny carrots before, a new idea of this vegetable.

Beets may be allowed to grow until about six inches tall, when their roots have just begun to swell.

Steps in Growing Sweet Corn

Sow seed in hills 3' to 4' apart each way, about 5 seeds to the hill. Don't do your planting until the ground is warm. For good supply, plant 3 times 3 weeks apart.

To, sowhills, stretch a line, just as you would for a seed drill, and along this mark the location of the hills at the proper intervals.

Scoop out a shallow depression and mix with the soil at its bottom a quantity of plant food. Mix the plant food thoroughly and cover it with fresh soil, almost filling the hole; then sow the seed and cover with light soil, which can be depended upon not to form a crust before the seeds have sprouted.

Thin out to 3 strong plants in each hill when 5" high. Light



dressing of nitrate of soda previous to or during rain will hasten the growth of young plants.

Working the soil is extremely important to good growth. Hoe at least weekly until 3' high. Do not work so close to the plant as to endanger the roots.

Staking and Fertilizing Tomatoes



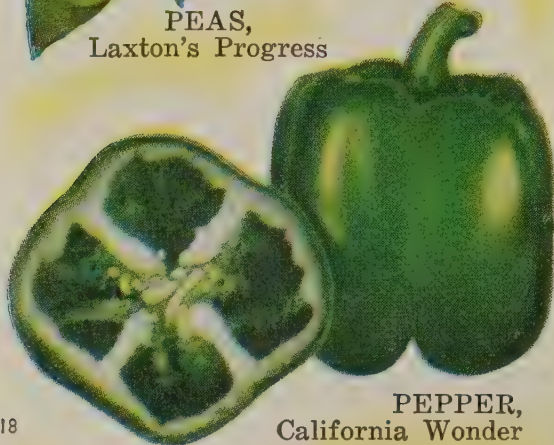
To continue growth to the main shoot trim lower leaves as plant grows (see Illustration 1 at left). Don't let the plants develop like the second one at the left. And it's well worthwhile to stake and tie the plants, as in Illustration 2.

Don't use poultry manure in growing tomatoes: It forces long, sappy growth with practically no fruit. If you do use animal fertilizers on tomatoes, be sure to balance them by adding superphosphate and muriate of potash: otherwise fruit may be poor. The best plan of feeding is to use balanced plant food for a side dressing, applying it regularly as the plants grow.



PEAS,
Laxton's Progress

CARROTS,
Imperator



PEPPER,
California Wonder

CANTALOUPE
Rocky Ford



Hearts of Gold



CUCUMBER,
Long Green



CORN, Golden
Cross Bantam



Best Times To Harvest

Beans should be tender, from half to three fourths of the mature size. They should snap easily with no fibers or strings.

Lima Beans are at their best just as the lower end of the pod shows a faint tinge of yellow.

Beets can be used at any time. The young plants are fine for greens. When the roots are large enough to handle they may be used separately. Beets are best when less than 2 inches thru.

Carrots can be used from finger size up. Flavor and tenderness begin to deteriorate in most varieties when they grow larger than 1½ inches across.

Corn is sweetest when in the milk stage. This can be recognized by the silk turning brown and dry and the cob leaning away from the stalk. When lightly squeezed there is a springy feel to the ear.

Cucumbers make the best salads when the seeds are still immature. The fruits are best if they are about ¾ of the mature length.

Melons should be vine ripened for real flavor. This can be told when the stalk starts to separate from the fruit. The blossom end should have a soft, springy feel when pressed.

Peas are sweetest just as the seeds reach mature size. This can be learned by pressing the pods lightly. If the seeds feel about the same size as the ones you planted, and the pod is a bright green it is ready for picking. Pods do not always develop every

seed so pick the pods when the largest seeds are ready.

Leaf crops for salads are best harvested in the cool of the day. They should be protected from drying immediately. Salad crops picked when slightly wilted do not regain the same crispness and flavor as when picked moist with dew.

Radishes may be used as soon as they are big enough to handle. They become quite hot when fully mature or if grown in hot weather. Pithiness is an indication of over-maturity.

VEGETABLE STORAGE

Many vegetables can be kept for use during winter by proper storage. It is often cheaper and easier to store than to can them and, with some varieties, the stored quality is better than that of the canned product.

Successful storage depends upon (1) selecting vegetables of good quality; (2) picking them at the proper stage of maturity; (3) having the proper temperature and the right degree of humidity in the storeroom.

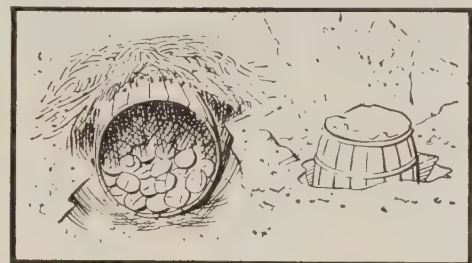
The desirable stage of maturity varies with the crop. Cabbage, onions, squashes and pumpkins will not keep well unless fully matured. Beets, carrots, parsnips, turnips and salsify should not be allowed to become fully matured, as they are likely to become woody.

Best storage conditions can be summarized thus: cool and moist—beets, carrots, salsify, turnips, winter radishes and celery; cool and moderately moist—cabbage and potatoes; cool and dry—onions and dry beans; warm and dry—squashes, pumpkins and sweet potatoes.

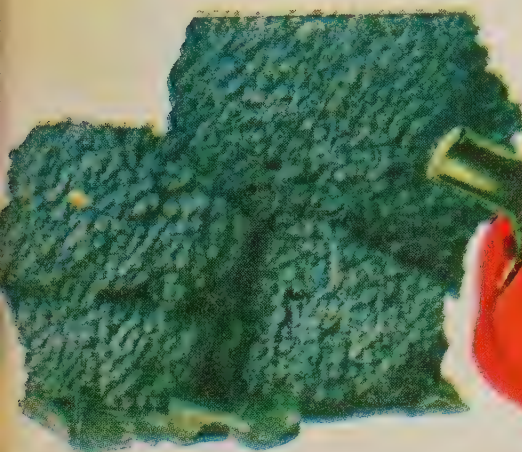
All these except dry beans, onions, squashes, pumpkins and sweet potatoes may be kept in the same storage room if the cabbages are on shelves and the potatoes are in slatted crates or bins. The best temperature for most vegetable crops is just above freezing, i.e., 32° F. If potatoes are included, the temperature should not go below 34°. A basement without a furnace is ideal. If the house has a concrete basement with a furnace, then a room protected from the furnace heat is necessary.

Temperature can be maintained in a storage cellar by opening and closing windows.

A dirt floor is best and, if humidity is low, water can be sprinkled on the floor. Root crops can be stored in boxes of sand or soil in the basement and kept just moist.



Small quantities of vegetables can be stored outdoors. A handy way is to sink a box or barrel about half its depth in the ground. Put the vegetables in and put on top of them a mattress cover made of burlap bags stuffed with straw. Cover over with a 6-inch layer of clean straw or leaves and then cover this with dirt to hold in place.



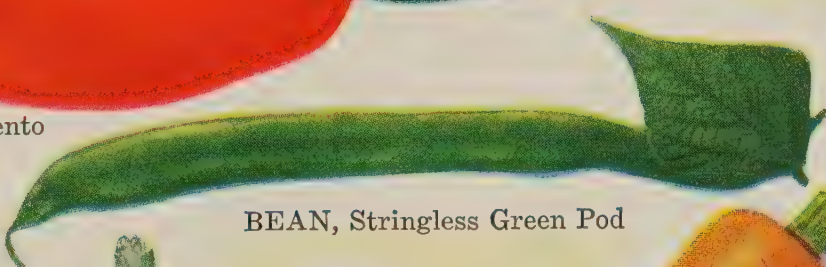
BROCCOLI, Italian Green Sprouting



PEPPER, Pimento



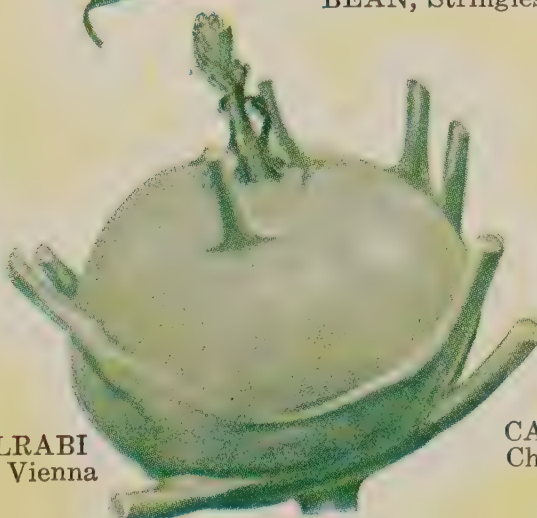
CUCUMBER, Straight Eight



BEAN, Stringless Green Pod



BEETS, Detroit Dark Red



KOHLRABI White Vienna

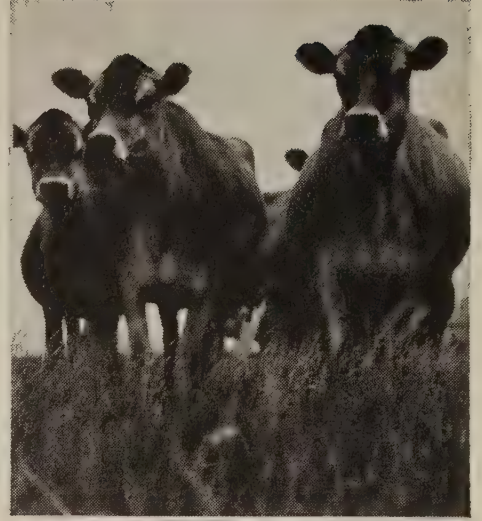


CARROTS Chantenay



GRAINS

DEPENDABLE FARM SEED



GRASSES

Alfalfa—The No. 1 soil builder and restorer. We carry a full range of varieties, adapted to this territory.

Millet—An excellent food for stock and poultry. Also a good green fodder and hay plant. Chokes out weeds.

Rape, Dwarf Essex—Highly recommended for pasture for sheep, cattle and hogs. Makes splendid green feed for poultry. Plant early spring in moist soil.

Sorghums—An excellent soiling crop furnishing succulent feed for milch cows. A large yielding fodder crop. A good range of varieties.

Soy Beans—The crop of many purposes. Excellent for hay, ensilage, grain, and soil improvement. Ground soy beans are as good or better than Oil Meal for mixing with grains for dairy ration.

Vetch—A great producer for hay, pasturage or silage. Good cover crop and soil builder. Needs only moderate moisture, grows in almost any soil.

Clovers

Alsike—Very hardy. Does better on moist land than other varieties of Clover. Suitable for hay or pasture. Good bee plant.

Medium Red or June—The most valuable of the clover family. Makes two crops the second year. Does not exhaust the soil but enriches it.

Mammoth Red—Also called "Pea

Vine" Clover. Grows large and course, often used for plowing under to enrich soil.

White Dutch—A very hardy creeping clover, adapts itself to great variety of soils and climates. Good pasture for sheep or cattle; fine for bees.

White Sweet (Biennial)—Excellent for pasture, hay and a soil improver. Drought-resistant.

Grasses

Alta Fescue—New all-purpose, all-location grass. Highest yielding grass for pasture-hay-silage. Grows on wet or dry, acid or alkali soil. Takes a year to establish but lasts 20 years or more.

Brome Grass—Drought defying, resistant to frost and extreme heat alike. Very early, and stays green late in fall. Produces abundant pasture and enormous crops of high grade hay.

Kentucky Blue Grass—Excellent for pasture for all kinds of stock. Very hardy. Roots from tough sod. Requires two years to get well started, so often sown in mixtures with other grasses.

Orchard Grass—Hardy, quick-growing. Gives large yield of excellent hay. May be cut several times during season. Will grow in shady places.

Reed Canary Grass—Especially suited to swampy, over-flowed lands; but thrives on uplands where moisture is abundant. Makes splendid pasture, very early; lasts to late fall.

Red Top—Valuable for most soils. A good permanent grass. It should be grazed close. Grows successfully on alkali lands where other grasses fail.

Rye Grass, Domestic—Fast growing one-year grass. Yields abundantly and matures all in one season. Helpful as a nurse crop to other grasses.

Rye Grass, Perennial—A good pasture grass. Grows quickly and withstands drought reasonably well.

Sudan Grass—The ideal emergency hay and pasture crop for late planting. Never plant until ground is warm.

Timothy—Unsurpassed as a crop for hay. Relished by all kinds of stock, especially horses. Not suitable for

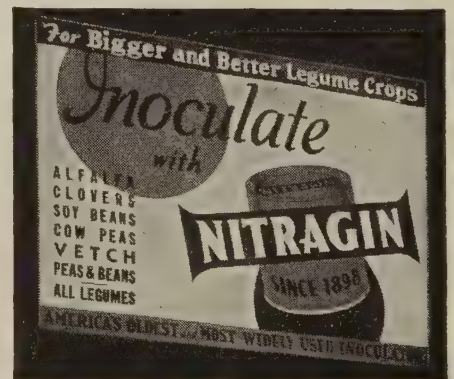
permanent pasture. Should not be cut too early or pastured too late in fall.

Seed Corn

Our selection of seed corn is built on intimate knowledge of this district—and conscientious application of that knowledge. So you are always in good hands when you buy seed corn here.

Seed Potatoes

Our certified stocks are the most economical you can plant, they reduce your hazards, give you bigger production and fewer culls. They are true to name.



**Ask for our latest
COMPLETE LIST
of varieties and prices
including many not listed
here.**

SEED TREATMENT

More and more the coating of seed with stimulating bacteria is gaining favor with production-wise farmers. We highly recommend seed treatment for higher yields, faster germination and growth. Be sure to ask us about it the next time you stop in.

ALFALFA (A)		SOYBEANS (S)	
Sweet, Bur, Hubam Clovers		Size	Retail
	1 bu. each....\$.50	2 bu. each....	.35
		5 bu. each....	.55
		25 bu. each....	2.50
CLOVERS (B)		Beans (D)	
Red, Alsike, Crimson,		Navy, Pinto, Wax,	
	1 bu. each....\$.50	String, Kidney and	
		Great Northern	
		1 bu. each....\$.50	
LESPEDEZA (L)		PEANUTS,	
100 lb. size (Inoculates up to 100 lbs.)\$.50	COW PEAS (E)	
		2 bu. each....\$.35	
		5 bu. each....	.55
PEAS, VETCHES (All Varieties)		GARDEN SIZE—Peas, Beans, Sweet Peas, Lupines, Lima Beans and Edible Soybeans.	
100 lb. size (Inoculates up to 100 lbs.)ea. \$.50	Enough for 8 lbs. seed—Price 15c each.	

PLANTING BY THE



1951 MOON PHASES and POSITIONS

Many gardeners like to govern their planting by the phases of the moon. For them, we show here all the necessary information generally shown by more voluminous arrangements. As seedsmen, we cannot vouch for the effectiveness of this method, but we are glad to provide this complete and up-to-date chart for those who want it.

Zodiac Signs and their influence

♈ **ARIES:** Tends to dryness, barrenness. Fairly good for cultivating, spraying and weeding.

♉ **TAURUS:** Fairly productive. A good sign for planting root crops particularly potatoes and bulbous plants.

♊ **GEMINI:** Dry and barren. Not good for any kind of planting or transplanting. Kill noxious growths.

♋ **CANCER:** Moist, very fruitful, most productive of the Zodiac. Planting and transplanting should yield good crops. Irrigate, bud, graft, transplant.

♌ **LEO:** Most dry and barren sign. Use only to kill weeds, destroy roots, etc.

♍ **VIRGO:** Moist but barren. Not recommended for planting or transplanting; good for cultivating and destroying.

♎ **LIBRA:** Fairly fruitful. Seed for hay, corn, fodder, etc. Produces vigorous pulp growth, reasonable amount of grain. Good for flowers.

♏ **SCORPIO:** Next to Cancer in productiveness. Irrigate but do not dig potatoes.

♐ **SAGITTARIUS:** Generally considered barren but used by many for onions, seeding for hay, destroying weeds, etc.

♑ **CAPRICORN:** Earthly, fairly productive. Similar to Taurus but drier. Bulbous flowers, potatoes, tubers, root crops.

♒ **AQUARIUS:** Somewhat barren. Good only for cultivation and extermination of pests.

♓ **PISCES:** Similar to Cancer so use for same purposes. Very productive. Do not dig potatoes.

When to Plant

The tables at right show when the moon enters each sign of the Zodiac. It also shows the moon's changes.

Under each month, we show first the time at which the moon enters each SIGN (day of the month and hour of the day, Central Standard Time). Then we show the moon CHANGES (day and hour) for each month.

● **1st QUARTER MOON, INCREASING**—During 1st Quarter of Moon plant the following: Asparagus, Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Celery, Corn, Cucumbers, Endive, Kohlrabi, Leeks, Lettuce, Spinach, Barley, Oats, Rye, Wheat.

☾ **2nd QUARTER, MOON INCREASING**—During 2nd Quarter of Moon plant the following: Beans, Egg Plant, Melons, Peas, Peppers, Pumpkins, Squash, Tomatoes, flowers, and cereals.

When possible, plant seed while the Moon is in the fruitful signs of Cancer, Scorpio or Pisces. The next best signs are Taurus, Libra and Capricorn.

☾ **3rd QUARTER, MOON DECREASING**—During 3rd Quarter of Moon plant the following: Beets, Carrots, Chicory, Parsnips, Potatoes, Radishes, Rutabagas, Onions, Turnips, Tubers.

☾ **4th QUARTER, MOON DECREASING**—In 4th or Last Quarter of the Moon turn sod, pull weeds, and destroy noxious growths, especially when Moon is in barren signs, Gemini, Leo, Virgo or Aquarius.

JANUARY

1 ☾ .0:00a
2 ♊ .9:53a
4 ♄ .11:35p
6 ♋ .11:31a
8 ☾ .11:39a
10 ♌ .2:00p
12 ♍ .8:11p
15 ♎ .6:13a
17 ♏ .6:37p
20 ☾ .7:04a
22 ♌ .6:09p
25 ♎ .3:24a
27 ☾ .10:44a
29 ♊ .4:00p
31 ♄ .7:15p

Changes

● 7..2:12p
☾ 14..6:23p
☾ 22..10:43p
☾ 30..9:13a

FEBRUARY

2 ♋ .8:52p
4 ☾ .10:05p
7 ♌ .0:33a
9 ♍ .5:48a
11 ♎ .2:35p
14 ♏ .2:19a
16 ☾ .2:51p
19 ♌ .1:58a
21 ♎ .10:40a
23 ☾ .5:01p
25 ♊ .9:30p
28 ♄ .0:48a

Changes

● 6..1:54a
☾ 13..2:55p
☾ 21..3:12p
☾ 28..4:59p

MARCH

2 ♋ .3:29a
4 ☾ .6:12a
6 ♌ .9:48a
8 ♍ .3:17p
10 ♎ .11:35p
13 ♏ .10:38a
15 ☾ .11:06p
18 ♌ .10:42a
20 ♎ .7:38p
23 ☾ .1:17a
25 ♊ .4:34a
27 ♄ .6:41a
29 ♋ .8:53a
31 ☾ .0:04p

Changes

● 7..2:50p
☾ 15..11:40a
☾ 23..4:50a
☾ 29..11:35p

APRIL

2 ♌ .4:45p
4 ♍ .11:18p
7 ♎ .7:52a
9 ☾ .6:40p
12 ☾ .7:05a
14 ♌ .7:17p
17 ♎ .5:02a
19 ☾ .11:08a
21 ♊ .1:53p
23 ♄ .2:40p
25 ♋ .3:20p
27 ☾ .5:33p
29 ♌ .10:15p

Changes

● 6..4:52a
☾ 14..6:55a
☾ 21..3:30p
☾ 28..6:17a

MAY

2 ♍ .5:29a
4 ♎ .2:47p
7 ♏ .1:51a
9 ☾ .2:14p
12 ♌ .2:48p
14 ♍ .1:44p
16 ☾ .9:02p
19 ♊ .0:19a
21 ♄ .0:43a
23 ♋ .0:08a
25 ☾ .0:46a
27 ♌ .4:10a
29 ♍ .10:57a
31 ♎ .8:33p

Changes

● 5..7:35p
☾ 13..11:32p
☾ 20..11:45p
☾ 27..2:17p

JUNE

3 ♏ .8:03a
5 ☾ .8:29p
8 ♌ .9:10a
10 ♎ .8:44p
13 ☾ .5:25a
15 ♊ .10:11a
17 ♄ .11:23a
19 ♋ .10:38a
21 ☾ .10:07a
23 ♌ .11:54a
25 ♍ .5:15p
28 ♎ .2:20p
30 ♏ .1:51p

Changes

● 4..10:40a
☾ 12..0:52p
☾ 19..6:36a
☾ 26..0:21a

JULY

3 ☾ .2:27a
5 ♌ .3:00p
8 ♎ .2:35a
10 ☾ .0:01p
12 ♍ .6:12p
14 ♄ .8:59p
16 ♋ .9:13p
18 ☾ .8:43p
20 ♌ .9:33p
23 ♍ .1:24a
25 ♎ .9:08a
27 ♏ .8:09p
30 ☾ .8:42a

Changes

● 4..1:47a
☾ 11..10:51p
☾ 18..1:18p
☾ 25..1:02p

AUGUST

1 ♌ .9:06p
4 ♎ .8:17a
6 ☾ .5:30p
9 ♊ .0:21a
11 ♄ .4:29a
13 ♋ .6:18a
15 ☾ .6:54a
17 ♌ .8:20a
19 ♍ .11:01a
21 ♎ .5:31p
24 ♏ .3:28a
26 ☾ .3:44p
29 ♌ .4:10a
31 ♎ .2:58p

Changes

● 2..4:36p
☾ 10..6:22a
☾ 16..9:02p
☾ 24..4:21a

SEPTEMBER

2 ☾ .11:29p
5 ♊ .5:49a
7 ♄ .10:10a
9 ♋ .1:05p
11 ☾ .3:12p
13 ♌ .5:24p
15 ♍ .8:50p
18 ♎ .2:44a
20 ♏ .11:50a
22 ☾ .11:35p
25 ♌ .0:05p
27 ♎ .11:01p
30 ☾ .7:08a

Changes

● 1..6:49a
☾ 8..0:13p
☾ 15..6:35a
☾ 22..10:14a
● 30..7:53p

OCTOBER

2 ♊ .0:21p
4 ♄ .3:47p
6 ♋ .6:30p
8 ☾ .9:20p
11 ♌ .0:47a
13 ♍ .5:19a
15 ♎ .11:40a
17 ♏ .8:26p
20 ☾ .7:43a
22 ♌ .8:23p
25 ♎ .7:59a
27 ☾ .4:20p
29 ♊ .9:06p
31 ♄ .11:18p

Changes

☾ 7..5:59p
☾ 14..6:54p
☾ 22..5:53p
● 30..7:53a

NOVEMBER

3 ♋ .0:40a
5 ☾ .2:45a
7 ♌ .6:23p
9 ♍ .11:54a
11 ♎ .7:09p
14 ♏ .4:16a
16 ☾ .3:30p
19 ♌ .4:12a
21 ♎ .4:32p
24 ☾ .2:06a
26 ♊ .7:31a
28 ♄ .9:18a
30 ♋ .9:23a

Changes

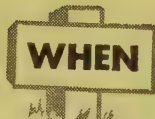
☾ 6..1:00a
☾ 13..9:53a
☾ 21..1:59p
● 28..6:04p

DECEMBER

2 ☾ .9:46a
4 ♌ .0:21p
6 ♍ .5:22p
9 ♎ .1:05a
11 ♏ .10:55a
13 ☾ .10:23p
16 ♌ .11:05a
18 ♎ .11:50p
21 ☾ .10:37a
23 ♊ .5:31p
25 ♄ .8:22p
27 ♋ .8:22p
29 ☾ .7:38p

Changes

☾ 5..10:22a
☾ 13..3:30a
☾ 21..8:33a
● 28..5:42a



HOME GARDENING GUIDE



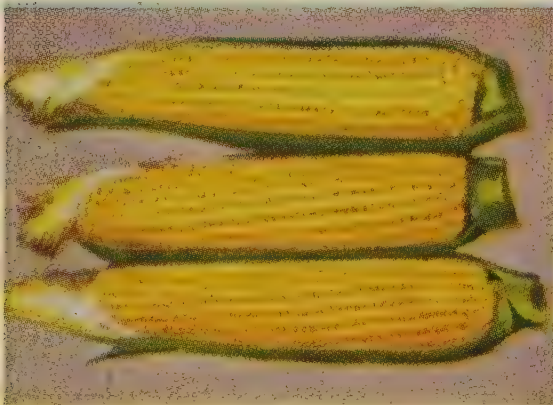
VEGETABLE GARDEN PLANTING GUIDE

Following each vegetable listing in the catalog you will find the term of maturity, so you will know how to date your plantings in the matter of time.

Below is a chart to guide you in spacing between plants,

between rows, amount of seed required, etc. With this information you are ready to map out a garden that will make full use of every foot of space. You can also plan your garden for catch cropping, inter-cropping and succession cropping.

	Seed Required for 50 ft. of row	Distance Between Rows (inches)	Distance Apart In Row (inches)	Depth to Plant (inches)	Approx. Yield Per 50 ft. of row		Seed Required for 50 ft. of row	Distance Between Rows (inches)	Distance Apart In Row (inches)	Depth to Plant (inches)	Approx. Yield Per 50 ft. of row
ASPARAGUS	1/2 oz.	24	20	1/2	25 lbs.	MUSKMELON	1/2 oz.	60	48	3/4	50 fruit
BEANS, BUSH	1/2 lb.	24	4	1 1/2	20 qts.	MUSTARD	1/4 oz.	24	9	1/2	1 bu.
BEANS, LIMA	1/2 lb.	24	3	1	32 qts.	OKRA	1 oz.	36	15	1	450 pods
BEANS, POLE	1/2 lb.	36	8	1 1/2	30 qts.	ONION	1/4 oz.	18	4	3/4	1 bu.
BEANS, POLE LIMA	1/2 lb.	48	8	1 1/2	1 1/4 bu.	ONION SETS	1 pt.	12	2	1	60 bun.
BEETS, TABLE	1/2 oz.	24	3	1/2	1 1/4 bu.	PARSLEY	1/4 oz.	12	6	1/2	45 bun.
BEETS, MANGEL	1/2 oz.	28	4	1		PARSNIPS	1/2 oz.	18	4	1/2	1 bu.
BROCCOLI	1/8 oz.	24	24	1/2	25 head	PEAS	3/4 lb.	24	2	1	1 bu.
BRUSSELS SPROUTS	1/8 oz.	24	18	1/2	15 qts.	PEPPERS	1/8 oz.	30	20	1/2	300 fruit
CABBAGE	1/4 oz.	24	12-24	1/2	35 head	PUMPKIN	2 oz.	96	60	3/4	25 fruit
CHINESE CABBAGE	1/2 oz.	24	12	1/2	40 head	RADISH	1/2 oz.	12	2	1/2	50 bun
CARROTS	1/4 oz.	16	3	1/2	24 qts.	RHUBARB	1/2 oz.	48	48		100 stem
CAULIFLOWER	1/4 oz.	24	20	1/2	25 head	RUTABAGA	1/8 oz.	24	6	1/2	1 bu.
CELERY	1/8 oz.	24	6	1/4	100 stalk	SALSIFY	1/2 oz.	18	2	1/2	300 roots
COLLARDS	1/4 oz.	30	18	1/2	3 bu.	SPINACH	3/4 oz.	18	5	3/4	1 1/2 bu.
CORN, SWEET	4 oz.	36	9	1	100 ears	SPINACH, N. Z.	1/2 oz.	36	18	1	50 lbs.
CUCUMBER	1/2 oz.	48	36	1/2	100 fruit	SQUASH, BUSH	1/4 oz.	48	48	1	60 fruit
DILL	1/4 oz.	18	4	1/2		SQUASH, WINTER	1/4 oz.	72	72	1	35 fruit
EGG PLANT	1/8 oz.	36	24	1/2	75 fruit	SWISS CHARD	1/2 oz.	18	15	1	25 lbs.
ENDIVE	1/2 oz.	18	12	1/2	50 fruit	TOMATO	1 1/8 oz.	40	36	1/2	2 bu.
KALE	1/2 oz.	32	22	1/2	50 plant	TURNIP (roots)	1/4 oz.	18	4	1/4	1 bu.
KOHLRABI	1/4 oz.	24	6	1/2	1 bu.	TURNIP (greens)	1/2 oz.	12	4	1/4	1 1/2 bu.
LETTUCE	1/4 oz.	18	12	1/4	50 head	WATERMELON	1/2 oz.	96	96	3/4	20 fruit



SWEET CORN, Ioana



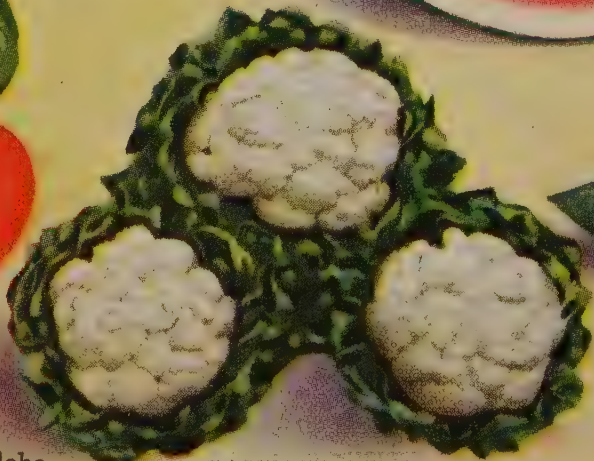
WATERMELON
Dixie Queen



TOMATO, Marglobe



RADISH,
Early Scarlet Globe



CAULIFLOWER
Early Snowball



PEAS,
Dark Podded Telephone

PLANTING PLANS

to make your garden more beautiful and more fruitful

To get the most out of your garden, make a complete plan on paper, and keep it as a record to check against in succeeding years.

The right kind of garden plan gives you all these advantages:

1. A succession of fresh vegetables in pleasing variety throughout the season;
2. A succession of bloom in the flower department;
3. A great saving of time and energy, by knowing just what and when to plant, and when to expect to harvest each crop;
4. Seed saved, by knowing just how much you will need;
5. Full use of every foot of soil by succession and companion cropping;
6. A chance to rotate crops on a scientific basis to improve yield and reduce disease and plant infestation.

Secret of Maximum Production

Planning for a steady succession of crops from each row is really a very simple matter of timing. The sample plan below demonstrates the principles of this important idea.

Rows shown in black (first planting) are:

(a) Early crops, which, when harvested, are followed by later crops. (In the 3rd row, for instance, cabbage is planted early in April and harvested in July to make room for late beets.)

(b) Crops which remain in the garden (snap and lima beans, peppers, etc.)

The rows shown in red are:

(a) Succession crops that are planted in the same space after the early crops are harvested (fall spinach after onions, winter squash after early beets, etc.).

(b) Companion crops or quick-maturing crops interplanted with slow-maturing crops (onion sets or lettuce, for example, planted between the young tomato plants will be harvested before the tomato vines require the entire space).

Making the Layout

Take a piece of paper—big enough so you can put in all the information you need. (An easy-to-figure scale is $\frac{1}{4}$ inch on the paper to 1 foot in your garden.) Begin by making a rough diagram.

Now, with this rough sketch as a guide, and with a list of the vegetables that your family likes and that you have decided you can grow in your plot, you're ready to begin mapping the actual planting.

COSMOS SENSATION	PITOMIA TORCH	CECILE WINE CAMPBELL	HELIAN THUS	COSMOS RADIANCE	MARIGOLD GLITTERS	LAKEVIEW REGAL GILK	EDMUND ORANGE PUFFLES	PHLOXA WHILL ROGERS
AGERATUM BLUE EYE	GAILLARDIA PINK	SNIP-DEASON	CINIAUREA BLUE ROY	SCARIOSA PEACE	AGERATUM BLUE FERT	PHLOXA ALBID	SNAP-ETELA	ACOSTEANA
DIANTHE	AGERATUM MONKEY BLUE	POMPE LIMPET	ALYSSEUM FAYETTE	ASTER BRIGHT	PEPPY	PETUNIA BLUE CHERRY	CAMPYTHOR WHITE	MARIGOLD DWARF
								AGERATUM BLUE EYE

PLAN FOR A GARDEN OF ANNUALS (approximately 25 feet long)

Planning the flower garden is fun. Here your skill as a gardener shows its true artistry. Your imagination can focus on flower selections for height, colors, shapes and contrasts. Successfully arranging bushy and sparse plants, shaggy blossoms and the delicate varieties in orderly patterns of beauty is one of the greatest thrills the flower gardener enjoys. The possibilities are endless.

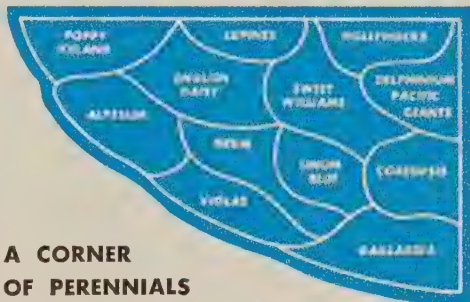
Galvanized wire, staked out flush to the ground, bent and spliced at the intersections is helpful in permanently establishing a plan like the one shown above. Observe how this arrangement places the tall flowers in the back, and the shortest in the foreground. Not only does this provide maximum display of each variety, but cultivation is made easier and with little disturbance to adjoining plants.

DELPHINIUM PACIFIC GIANTS	IRIS	HOLLYHOCKS MIXED	LIPODOR BANGS	DIANTHEM BLUE TREASURES
PHLOX PERENNIAL	RUSSULA	IRIS BLUE	GAILLARDIA MONARCH	IRIS
ENGLISH DAISY	ANTHEM ANAKOVA	VIOLA	IRIS	IRIS

A PERENNIAL GARDEN (approximately 25 feet long)

Over each flower listed in the Flower Seed section are shown the height, culture key and whether it is perennial, annual or biennial. By using page 30 as a help you can estimate germination and blooming periods so that a constant succession of blooms or simultaneous blooming can

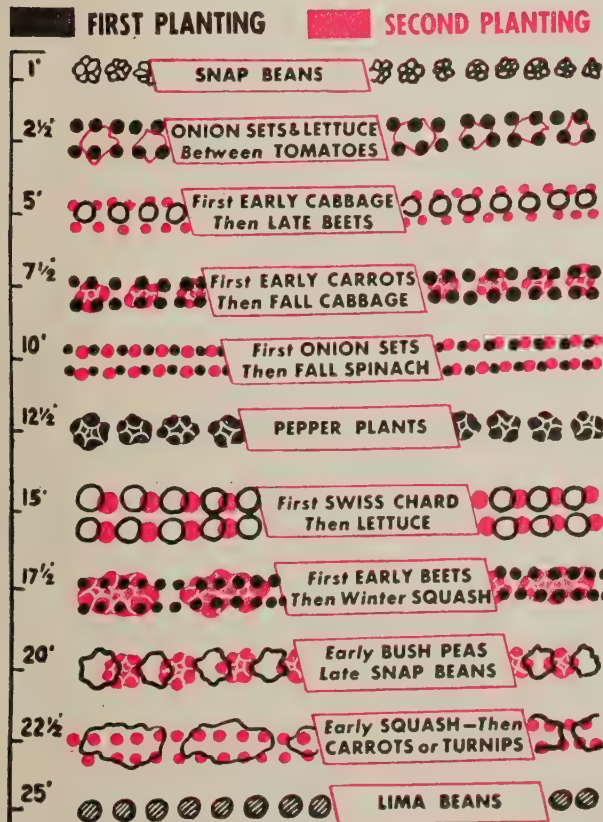
be planned. The blueprints shown here are "pure" annual and perennial beds. The gardener who transplants perennials and biennials from cold frames or clay pots into annual beds or carefully sows annuals into his perennial beds can improve the over-all plan considerably.



A CORNER OF PERENNIALS



A CORNER OF ANNUALS



PLAN NO. 2

- Row No.
- 1 Mustard
 - 2 Garden Cress
 - 3 Summer Squash
 - 4 Spinach
 - 5 Spinach
 - 6 Beans—Lima or Green Soy
 - 7 Bush Beans followed by late Lettuce
 - 8 Bush Beans followed by Cauliflower
 - 9 Bush Beans followed by Cauliflower
 - 10 Late Peas followed by late Cabbage
 - 11 Midseason Peas followed by late Cabbage
 - 12 2nd early Peas followed by Rutabagas
 - 13 1st early Peas followed by Brussels Sprouts
 - 14 Carrots, Radishes, followed by Kohlrabi
 - 15 Early Beets followed by Carrots, Radishes
 - 16 Lettuce followed by late Beets
 - 17 Kohlrabi followed by Endive

PLAN NO. 3

- Row No.
- 1 Radishes followed by Sweet Corn
 - 2 Green Onions followed by Sweet Corn
 - 3 Tomatoes interplanted with Peas
 - 4 Tomatoes interplanted with Peas
 - 5 Early Cabbage followed by Turnips
 - 6 Beets followed by Cabbage
 - 7 Potatoes or Onion Sets
 - 8 Carrots followed by Bush Beans

PLAN NO. 4

- 1 Sweet Corn
- 2 Radishes followed by Sweet Corn
- 3 Tomatoes interplanted with Lettuce
- 4 Early Peas ... mid-season Peas ... late Peas (1/3 row each, planted at 2-week intervals)
- 5 Early Cabbage followed by Turnips
- 6 Beets followed by Cabbage
- 7 Carrots followed by Bush Beans

LIST YOUR NEEDS AND SHOP EARLY

When your plan is complete, make up your list of seeds, plant food, insecticide, etc., and come in early. We'll help all we can. You know, we're just as anxious as you are that your garden shall be a success, and we'll do our part by supplying seeds and all the other things you need to do a good job.

PLANTING TO FEED A FAMILY OF FOUR

Have you ever wondered just exactly *how much* you should plant in your home garden to feed your family. Based on *one serving* for a family of four, these popular vegetables will take up the following space in your garden. If your family is smaller or larger, you can estimate accordingly.

Lima Beans2 feet	Carrots2 feet
Snap Beans1 foot	Cucumbers2 feet
Broccoli2 feet	Onion sets1 foot
Cabbage2 feet	Peas3 feet

Snap beans, for instance, take up 1 foot of space of 1 family portion. How often does your family like snap beans? Once a week? Well, the harvest time for snap beans is about four weeks, so four feet in your garden would satisfy their needs. And so on, with the other vegetables, based on the scale.

This way, and counting on extra footage for canning or freezing, you can decide accurately on the right amount to plant. No waste—no spoilage—and family needs will be amply satisfied.

WHEN TO HARVEST

One of the main advantages the home gardener has is that he can pick his vegetables one minute and have them in the kitchen the next. All vegetables are better if left on the plant until ready to serve.

Sweet corn, and peas, particularly, lose flavor every minute they are picked and the fine sweetness is soon lost. Many vegetables can be harvested at a younger stage in the home garden than is profitable with commercial crops. Beans, carrots, cucumbers, and beets are some of these. Others are harvested when dead ripe and at the peak of flavor as tomatoes, and melons.

SHORT CUTS TO BETTER CANNING

Choose only clean, sound and strictly fresh fruits or vegetables. When packing your jars or tins of canned foods, be careful not to crowd, nor to waste space. *Crowding prevents proper heating, which in turn, causes spoilage.*

There are several ways of processing fruits or vegetables for canning. The two methods most generally used are *water bath canners* and *pressure cookers*. **WATER BATH CANNER:** Make either a wire rack, or put a piece of wood at the bottom of the canner, to keep the jars ½ inch from the bottom. The water should be steaming when the jars are put into the canner. Lower the jars slowly into the water. Processing time is counted from the time the water is actually boiling. *Keep it boiling constantly and at the same rate of speed the whole time the processing is being done.* Remove the jars at the exact time your chart shows, and seal.

PRESSURE COOKERS: All non-acid vegetables should be processed in a *steam pressure cooker*. Place jars on rack in a cooker with 1 to 2 inches of water. *Be sure to leave enough space between jars to allow circulation of steam.*

Adjust and fasten lid securely. Do not close petcock until steam has escaped in a steady stream from 5 to 7 minutes. *The pressure must be kept steady.* Remove from heat when processing time is through and let stand until the gauge is at zero. Open petcock slowly, tilt the lid away from your face. Spread a heavy cloth over the top of the cooker; catch handles of rack through the cloth, and lift out. Seal jars according to direction.

GUIDE FOR QUICK FREEZING

Follow these simple directions accurately for best results when you freeze vegetables from your home garden.

VEGETABLE	PREPARATION	SCALDING
ASPARAGUS	Prepare right after picking. Cut in 1" pieces or 6" spears. Wash.	3 min.
BEANS, Green	Choose only tenderest beans. Break in 1" pieces or slice.	2 min.
BEANS, Lima	Shell, sort for size. Prepare within 2 hrs. after picking.	Young beans 1½-2½ min. 2½ min.
BEETS	Top and peel. Cut in ¼ inch slices or dice in small pieces.	
BROCCOLI	Soak in salt water ½ hr. Trim, split stalks and heads longwise. Cut in 1" pieces.	Small—3 min. Large—4 min.
BRUSSEL SPROUTS	Select fairly small sprouts.	4 min.
CARROTS	Scrape. Cut in ¼" slices or dice.	3 min.
CAULIFLOWER	Trim. Break into 1" pieces.	3 min.
PEAS	Use only tender peas. Wash. Prepare in 2 hrs. of picking.	45-60 sec.
RHUBARB	Use tender stalks. Cut into ¾" pieces.	1½ min.
SPINACH	Use tender greens. Wash thoroughly.	1 min.
SQUASH, winter	Use firm, hard rind variety. Bake or steam until done. Scoop out. Place pan in ice water to cool.	none
SQUASH, summer	Cook until done. Do not season.	none
SWEET CORN, on cob	Choose best ears. Wrap separately. Seal ends. Freeze promptly.	7-11 min.
SWEET CORN cut kernels	Scald. Slice corn from cob. Rinse well, drain and freeze promptly.	7-11 min.
TURNIPS	Choose tender, medium size. Wash well and dice in ½" cubes.	2½ min.

HINTS ON QUICK FREEZING

1. Only vegetables of the highest quality are worth your time to freeze. Always select choicest and tenderest. Freezing will not improve quality, but protects the original flavor.
2. Choose vegetables at the correct degree of maturity, as you would for your immediate table use.
3. Vegetables should be prepared for freezing as soon as possible after gathering. . .
4. Always use specially prepared wrapping materials. If not properly wrapped, frozen foods dry out.
5. Most vegetables (except squash) should be scalded or blanched before freezing. See the table.

VITAMINS IN VEGETABLES

Nutrition experts say that most of us are poorly nourished. As we all know now, even our "Three Good Squares A Day" often do not give us certain minerals and vitamins that we need. These necessary elements may be bought at the drugstore, but they can also be home grown for less cost. Garden fresh vegetables can provide nearly all of them in ample quantity. Following is a table showing just a few of the vegetable sources of vitamins available from your garden:

ASPARAGUS	B-1, C, B-2	CAULIFLOWER	C, B-2
BEANS, string	A, C	CORN, sweet	A, B-1, C, B-2
BEANS, lima	A, B-1, C, B-2	LETTUCE, leaf	A, B-1, C, G
BROCCOLI	A, B-1, C, B-2	SPINACH	A, C, B-2
CABBAGE	C, B-2	SQUASH, Hubbard	A
CARROTS	A	TOMATOES	A, C



The Old Gardener Says . . .

I reckon that the folks that are least bothered by all this inflation are gardeners. For here is one enterprise where you get dollars for pennies. Here is the world's greatest bargain in food—in tastiness, in health, plus all the fun in gardening.

Just imagine, a vegetable garden only 30 feet x 50 feet will keep a family of five in fresh vegetables all through the season—with plenty left over for canning and freezing. Here are a few paragraphs jotted down from my notebook on vegetables:

—about **RADISHES**. The secret of getting crisp, delicious radishes is quick growth. So use plenty of plant food in the soil where they are planted. This is undoubtedly the easiest of all vegetables to grow; the seeds germinate in a few days, and are ready for eating in 3 to 5 weeks. All through the planting season, a succession should be sown every 10 days, so that you may have plenty of mild, tender radishes for relish and salads all through the season.

—about **CUCUMBERS**. For small pickles, (gherkins) cucumbers should be gathered when only 2 or 3 inches long—about six weeks after sowing. For “dill” size pickles, they should be 4 to 6 inches long.

FOR **SLICING**—they are best when plump and cylindrical—but before they bulge in the middle or develop a yellow tinge at the blossom end.

—about **CABBAGE**. Few crops pay back the cost of fertilizing as well as cabbage. Use a good commercial fertilizer that can be applied before planting—and your crop will richly repay your efforts and expenditure.

—about **PEAS**. The first spring activity in the vegetable garden should be the sowing of peas. The low varieties can be planted as soon as the ground can be worked. Taller kinds about 10 or 15 days later.

—about **LETTUCE**. This tender, crisp, salad plant must be grown rapidly in what is known as “quick soil.” This means friable ground, well drained, in which there is constant moisture and an abundance of plant food.

A

A PORTRAIT GALLERY OF GARDEN ENEMIES SUCKING INSECTS



GLADIOLUS
THRIP, 1/16"



BEET LEAF
HOPPER, 1/8"



CHINCH BUG,
3/16"



TARNISHED
PLANT BUG, 1/4"



RED SPIDER
MITE, 1/60"



MELON APHID,
3/32"



CABBAGE
APHID, 1/32"



SQUASH BUG,
5/8"

CHEWING INSECTS



ASPARAGUS
BEETLE, 7/32"



ROOT MAGGOT,
1/3"



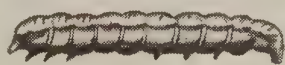
CABBAGE
WORM, 1"



STRIPED CUCUMBER
BEETLE, 1/4"



SPOTTED CUCUMBER
BEETLE, 1/4"



CUT WORM,
3/4" - 1"



SQUASH VINE
BORER, 1/2"



TOMATO HORN
WORM, 3" - 4"



POTATO
BEETLE, 3/8"



FLEA BEETLE
1/16"



MEXICAN BEAN
BEETLE, 5/16"



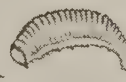
CORN BORER,
1"



CODLING MOTH,
1/2" - 3/4"



CABBAGE
LOOPER, 1 1/2"



CARROT
WEEVIL, 1/4"



CORN EAR
WORM, 1/4" - 1 1/2"

—about **PEPPERS**. Always, when gathering peppers, cut them with a knife, leaving only a short piece of stem, rather than run the risk of injuring the plant by pulling them off.

—growing **ASPARAGUS**. Any home garden, except the very smallest, should have a few rows of asparagus. Once established, an asparagus bed requires a minimum of attention and produces year after year a bounteous supply of delicious food. If properly cared for, a bed will last 15 to 20 years.

Plant asparagus in a section where it will not be in the way of plowing or other crops and where, if possible, it

will fit into the rest of the garden as a decorative feature.

For excellence of flavor you want young, tender carrots, radishes and beets—and to get them you must have rich soil that will develop the roots fast. Slow growing, old carrots are only fit for stock feed.

Corn is much better for table use if it is gathered while very young. With a little practice, the proper stage for harvesting can be determined. This is shortly after the “milk stage,” when the silks are dry and black, and the husk leaves have an appearance of maturity. If the ear feels plump and firm when grasped, it is generally ready.

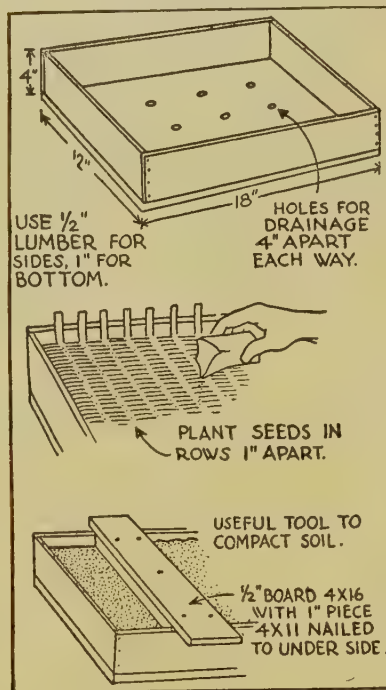
HOME GARDENING GUIDE

WINDOW SEED BOX

Window seed boxes are frequently relied on by gardeners who do not wish to operate a hot bed or cold frame, but still want to give an early start to a few subjects.

Any sort of shallow box can be used. The commercial flats are usually about 15 by 20 inches, and 3 to 4 inches deep. A wood which will stand wetting is used, such as cypress, or white pine.

Seeds may be broadcast in the small box, or sown in shallow rows.



Unless there is a hotbed or cold frame into which the seedlings can be transplanted, do not start the indoor box more than a month earlier than the safe date for outdoor planting.

Soil in the seed box should be a light, fertile loam. Sift, and place the coarser part in the bottom of the box, the fine soil on top. Firm it with a brick or piece of board, pressing gently. Make shallow drills with a ruler, sow the seed without crowding, and cover lightly with soil. Firm the soil again, and water the box by setting it in a tub of water, allowing the water to soak from the bottom up, to avoid disturbing the seeds.

Place the box in a cool, dark place until the seeds sprout. A piece of burlap, or a blanket of wet newspaper on top of the soil will prevent it drying out. As soon as the sprouts appear, carry the box to the light. Give the box all the light possible.

Place a pane of glass slightly larger than the box over it during the early stages of growth, to increase temperature. Each morning wipe off any moisture which has condensed on this glass, and prop up one end to give ventilation during the day.

Do not allow the soil to dry out, but avoid excessive watering, and use a gentle spray which will not wash the soil.

As soon as the seedlings have made their second pair of leaves they should be transplanted, either to small pots or to other flats.

The temperature of the home is usually satisfactory to the plants, provided it is not too hot. A day temperature not over 70 degrees

and a night temperature not below 55 degrees is satisfactory for most subjects.

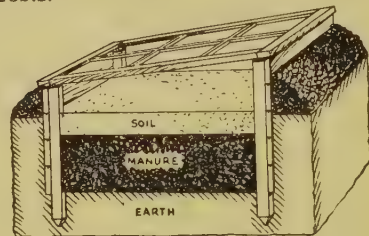
MAKING A HOTBED

Normally, these do not pay if used only for growing seedlings, but the advanced gardener will find them useful for protecting plants in fall, for storing winter vegetables or for growing lettuce and radishes until long after they are available in the open garden.

These should be located on the south side of a hedge, fence or building to break the wind, and must have at least six hours of direct sunshine during the day.

Standard hotbed sash is three feet wide and six feet long, so if sash is purchased, make hotbed of these dimensions. Frame should be sloped by making north side six to eight inches taller than south side to catch sunlight and to provide good drainage.

Dig hole six inches larger on all sides than the frame on which sash rests.



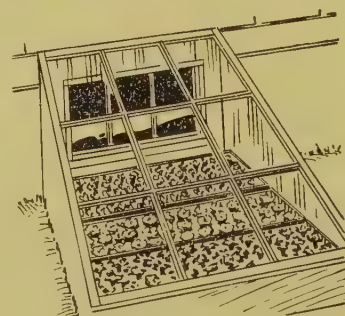
Pit should be 24" deep. Fill to top with fresh strawy horse manure and press down six inches. Set frame over manure and fill around outside and inside to level of ground. Add three inches of sifted soil inside frame. Heap leaves or straw around outside to conserve heat.

If manure is not available, dried leaves or chopped straw may be used by adding a handful of ammonium nitrate or ammonium sulfate to each bushel of leaves. This will not, however, generate as high a heat as manure.

As soon as frame is in place, water well, insert thermometer in soil and cover with sash, airing daily until thermometer drops below 85 degrees.

On sunny days ventilate thoroughly, but even on cloudy days a crack of air may be needed to get rid of ammonia odor. Cover glass at night with blankets, old rugs or hotbed mats to conserve heat.

Basement Window Greenhouse



The frame for a basement window greenhouse is made the same as for a manure hotbed, but the back is omitted and no pit is dug. The open back fits against the basement window. The open window both ventilates and heats, so that in most instances no further ventilation will be needed. On very cold nights, a 100 watt electric bulb will keep up heat.



HOLLYHOCK, Double

ANTIRRHINUM
TETRA (Snapdragon)



SCABIOSA,
Blue Moon

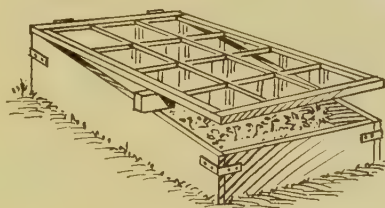
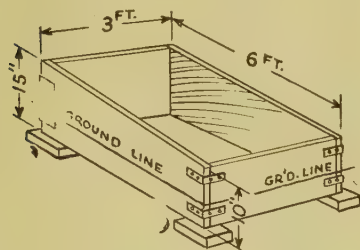


ZINNIA
Will
Rogers

HOME GARDENING GUIDE

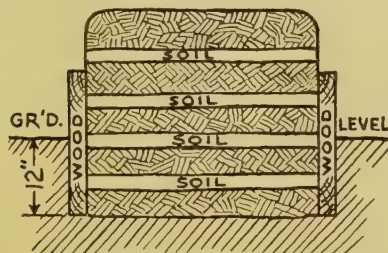
PLAN FOR A COLD FRAME

A cold frame is the same as a hotbed without manure or other source of artificial heat. It depends upon the sun for heat, and must be covered with hotbed mats to conserve this heat at night. It can be used only after the weather has warmed up somewhat, but before the danger from late frosts is past. Lettuce and radishes planted in the cold frame a month before frost is expected can be grown until late in the year if the glass is kept covered at night.



The Compost Heap

The compost heap is a "must" for the permanent garden. Select a spot behind a shed or otherwise hidden (if your garden is in the open) and spread out your garden wastes over this area in a layer six inches deep. Use weeds, old vegetable and flower plants, any non-greasy vegetable waste from the kitchen and lawn clippings. Trimmings from lawn edging are particularly valuable.



Between each six inch layer, sprinkle a little lime and a liberal amount of a good mixed fertilizer. The fertilizer will feed the bacteria that cause the vegetable wastes to decay. Then apply three or four inches of good garden soil over the lime and fertilizer. Repeat until the pile is two feet high. Wet down if rain doesn't fall. In six months all weed seeds and other vegetable matter will be broken down by the bacteria into a rich home made "manure" that will go a long ways towards making yours a perfect soil. You need not waste the space used for the heap, since cucumbers, melons and squashes never grow as well as when planted in shallow depressions in the compost heap.

Garden Sanitation

Weed control for a distance of at least 25 feet on all sides of the permanent garden is highly desir-

able. First, this helps reduce the number of weed seeds that will be carried or blown onto the garden itself. A few hours spent in weed control at any convenient time may save hours and days of weeding when time is precious.



Equally important is the value of destroying the hiding places of many insects that cause trouble in the garden. Leaf hoppers and borers travel from weedy patches to garden plants. Many pests hibernate and live over winter in weeds. By killing off weeds and keeping this zone dusted with D.D.T., fewer insects will attack the garden. Incidentally, chiggers or harvest mites are kept down by this treatment, increasing comfort in working the garden.

Weed destruction today has been simplified greatly with the improvements of the amazing new 2,4D weed killers which destroy weeds selectively and without danger to animals or equipment.

Easiest Annuals to Grow

We are often asked to recommend annuals for growing without much care, particularly around summer cottages used only on week ends, or where the soil is poor. We suggest Calliopsis, Gaillardia, Marigold, Petunia, annual Phlox, Scabiosa, Verbena and Zinnia. These usually bloom profusely without care or extra watering, though some water applied when seed is sown will often insure germination.

WHY FOLKS LIKE TO BUY GARDEN SUPPLIES HERE

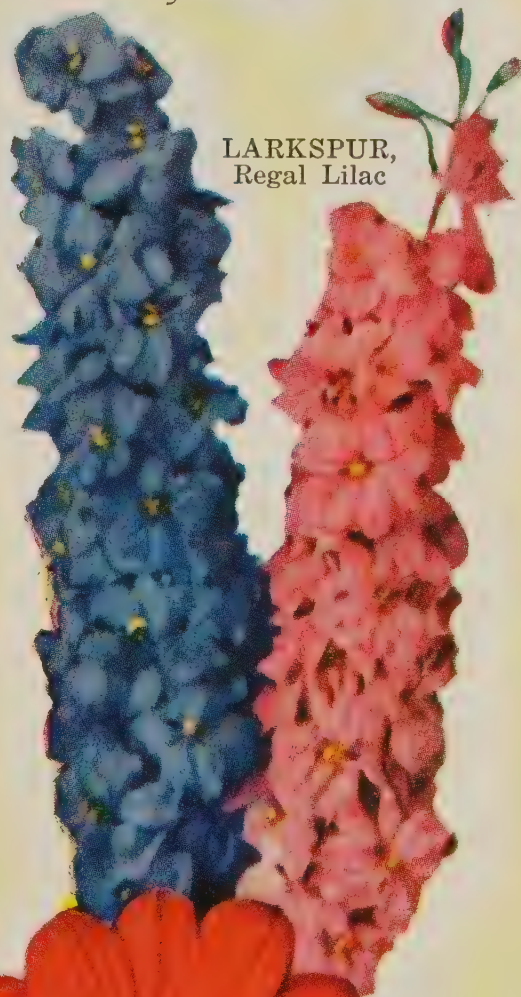
We don't have any monopoly on the Garden Supplies we sell. Quite a few of them can be bought in many other stores.

But good gardeners still prefer to buy here, because this is a real garden store. Here every transaction is a friendly deal between gardeners. Here we try our best to deliver something more than just merchandise.

That's because we're SEEDSMEN—and proud of it!
**FOR GARDEN SUPPLIES
SEE THE SEEDSMAN!**



MARIGOLD, Glitters



LARKSPUR,
Regal Lilac



TITHONIA,
Torch

28

CANDYTUFT—Iberis

(a) Culture III, 1'

White Hyacinth—Large conical spikes of snowy flowers. Fine for edging.
Umbellata mixed—Umbrella-like flower clusters. Many fine colors. Perennial Gibrætarica.

CARDINAL CLIMBER—**Imp. Cypress Vine**

(a) Culture III, 10-15'

Slender vine with bright green fern-like leaves. Red flowers. Pkt. 15c.

CARNATION

(a) Culture I or VIII, 18"

Chabaud's Giants—Large double flowers with sweet fragrance. All colors. Flower in six months. Pkt. 15c.

CASTOR BEAN—Ricinus

(a) Culture III or VII, 10'

Zanzibariensis—Tall, strong plant for bold effect. Large lobed bright green leaves. Excellent for backgrounds.

CELOSIA—Cockscomb

(a) Culture I or III, 1-3'

Shades of Red—Low grower with large crested heads, as rooster combs.
Feathered—Tall, feathery heads of flowers in red and yellow shades.

CHRYSANTHEMUM

(a) Culture II or IV, 1½'

Single Painted Daisy, mixed—Showy daisy-like flowers. Rings of red, yellow, on white, red or yellow flowers.

CENTAUREA—SEE BACHELOR'S

BUTTONS

CLARKIA

(a) Culture II or IV, 2'

Double mixed—Large double flowers in many gorgeous colors. Graceful plant. Does well in light shade.

CLEOME—Spider Plant

(a) Culture II or IV, 3-4'

Pink Queen—A tall plant with many pink flowers. Neat foliage. Pkt. 15c.
Helen Campbell—Delicate white flowers. Pkt. 15c.

COCKSCOMB—SEE CELOSIA

COREOPSIS

(hp) Culture VI, 2'

Sunburst—Large double flowers of rich golden color. Fine for cutting. Sturdy, good grower. Pkt. 15c.

COLUMBINE—SEE AQUILEGIA

CORN FLOWER—SEE BACHELOR'S
 BUTTON

COSMOS

(a) Culture II or IV, 3-4'

Dazzler—Wavy fluted petals of a velvety crimson-maroon. Pkt. 25c.
Orange Flare—Vivid orange flowers on long, sturdy stems. Pkt. 15c.
Orange Ruffles—Semi-double flowers. Golden orange. Airy effect. Pkt. 25c.
Yellow Flare—Butter-yellow flowers. Similar to Orange Flare. Pkt. 15c.
Radiance—A bi-color! Beautiful, deep rose flowers have a rich crimson zone in center. Striking! Pkt. 25c.
Sensation mixed—Huge single flowers, wavy petals, many colors. Pkt. 15c.

CYNOGLOSSUM—Chinese**Forget-Me-Not**

(a) Culture II, 15"

Firmament—Hundreds of tiny indigo blue flowers. Resemble Forget-me-nots. Bloom all summer. Pkt. 15c.

DAHLIA

(a) Culture I or II, 14"

Unwin's Ideal Bedding—Semi-double flowers on low bushes. Fine for beds or borders. Many colors. Pkt. 20c.

DAISY, AFRICAN—SEE ARCTOTIS

DAISY, ENGLISH—Bellis**Perennis**

(hp) Culture VI, 8"

Low plants with colorful double daisies in early spring. For beds, excellent for edges. Pkt. 15c.

DAISY, SWAN RIVER—**Brachycome**

(a) Culture II, 10"

Mixed—Many colored small daisy-like flowers freely produced all summer. Good garden stand-by. Pkt. 15c.

DELPHINIUM—Perennial**Larkspur**

(hp) Culture VI, 5'

Giant Pacific Hybrids—World famous strain of immense double flowers on tall stems. Many new colors. Pkt. 35c.

DIANTHUS—Pinks

(a) Culture I or VIII, 1'

Double and Single mixed—Fine mixture of colorful, scented, garden pinks.
Gaiety—Fringed petals in a wide range of flower colors and shapes. Single with lacy appearance. Pkt. 15c.
Heddensis—New tetraploid hybrids! Larger flowers, longer stems, better growth. Many fine colors. Pkt. 15c.

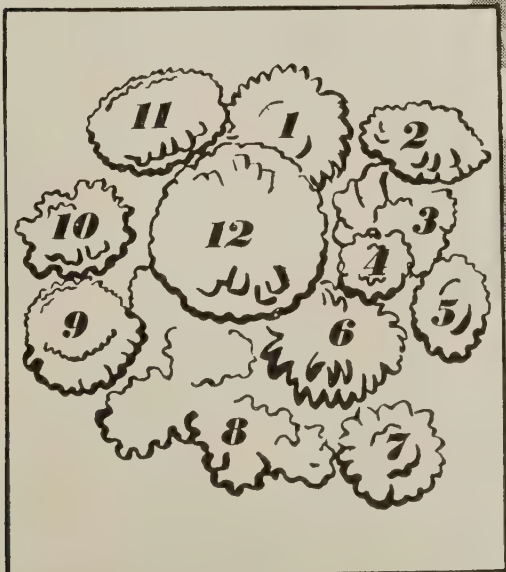
DIDISCUS—Blue Lace Flower

(a) Culture I or II, 2½'

Coeruleus—Lacy heads of lavender and blue flowers. Lovely to cut.

DIGITALIS—SEE FOXGLOVE

CAN YOU IDENTIFY THEM? This bouquet or "Muzzy Tuzzy" contains eight different types of flowers. Some are unusual varieties from a very common strain, for this reason we do not list them. If you can score 100% you are exceptional in this old English guessing game. 1 Gaillardia, 2 Zinnia, 3 Cosmos, 4 Calliopsis, 5 Chrysanthemum (Carinatum), 6 Aster, 7 Chrysanthemum (Segetum) 8 Candytuft, 9 Zinnia (Harmony type), 10 Carnation, 11 Mari-gold, 12 Zinnia.



HANDY PLANTING GUIDE FOR FLOWER GARDEN PLANNERS

KEY—For classification of flowers by purpose, location, etc., see the second column below. The meaning of the key letters in this column is as follows:

- | | |
|--------------------------------------|---|
| A —For dry, hot locations | G —For their foliage |
| B —For a succession of blooms | H —Everlasting for winter bouquets |
| C —For shady locations | I —For their fragrance |
| D —For poor soil | J —For porch or window boxes |
| E —For edging | K —Climbing Vines |
| F —For the rock garden | L —For backgrounds |

	Height (Inches)	Suitable for	Average Days to Germinate	Approx. Time of Bloom	Shape of Plant
Ageratum	4-12	E F J	5-10	10 Wks.	bushy
Alyssum, Sweet	2-12	B C D E F I J	5-10	6 Wks.	spreading
Snapdragon	12-60	C I L	20-25	3-4 Mos.	bushy
Columbine	18-36	C E F	15	3 Mos.	branchy
Lady Slipper	14-20	A E	10-12	6 Mos.	erect
Calendula	12-36	D	10-14	12-14 Wks.	bushy
Canterbury Bells	18-24	F	8-15	10-12 Wks.	bushy
Candytuff	6-18	B F I	5-10	8-10 Wks.	bushy
Bachelor Buttons	18-36	A B C D E I J	5-20	3-4 Mos.	erect
Chrysanthemum	24-36	A E	5-20	8-10 Wks.	bushy
Celosia	12-36	D E H	20-25	10 Wks.	bushy
Cosmos	36-60	A	5-15	10-12 Wks.	bushy
Coreopsis	18-36	A B D	10-20	4-5 Mos.	bushy
Dahlia, Dwarf	14	F	10	3-4 Mos.	bushy
Delphinium	36-72	L	15-21	3-4 Mos.	tall
Foxglove	30-48	F	10-20	3-4 Mos.	erect

Pinks	4-15	F I	5-10	12 Wks.	bushy
Eschscholtzia	10-12	C D F	5-12	12-15 Wks.	bushy
Four O'Clock	24-30	A D	5-10	3-4 Mos.	bushy
Gaillardia	18-30	D	15-20	2-3 Mos.	bushy
Godetia	12-24	C D	15-20	2 Mos.	erect
Baby's Breath	18-36	B H	15-20	8-10 Wks.	branching
Strawflower	24-36	H	5-10	3 Mos.	bushy
Hollyhock	48-84	L	5-20	10 Wks.	slender
Mexican Firebush	30-36	A B	15-18	Foliage	bushy
Larkspur, Annual	30-72	L	15-20	10-12 Wks.	tall
Lathyrus	60-72	I K	25-40	2-3 Mos.	vine
Lobelia	4-8	E J	10	10-12 Wks.	bushy
Marigold	8-36	B J	5-8	6-8 Wks.	bushy
Mignonette	10-12	B I		3-4 Mos.	erect
Moon Flower	12 ft. or more	I K	5-8	4-5 Mos.	vine
Morning Glory	12 ft. or more	A K	5-8	3-4 Mos.	vine
Nicotiana	30-48	I	20-25	10-12 Wks.	branchy
Pansy	4-8	C E F	10-15	10-12 Wks.	clump
Petunia	10-24	D E F J	18-20	10-12 Wks.	bushy
Phlox	10-18	A B C F I J	20-25	8-10 Wks.	bushy
Poppy	18-36	B	20	12-15 Wks.	erect
Portulaca	4-6	A D E F J	18-20	6 Wks.	spready
Salvia	12-42	A	15-25	3-4 Mos.	bushy
Scabiosa	18-30	I	18-20	2-3 Mos.	bushy
Stocks	12-24	I	5-15	12-14 Wks.	bushy
Schizanthus	18-36	C E	20-25	6-8 Wks.	bushy
Sweet Pea	36 or more	K	15-20	10-12 Wks.	vine
Sweet William	12-24	F	10	12 Wks.	bushy
Verbena	6-12	E F J	8-10	12 Wks.	spready
Wallflower	12-18	I	5-12	2-3 Mos.	bushy
Zinnia	12-36	A F	5-10	6-8 Wks.	bushy



ASTER,
Ballet

ALL AMERICAN
GOLD MEDAL
1950

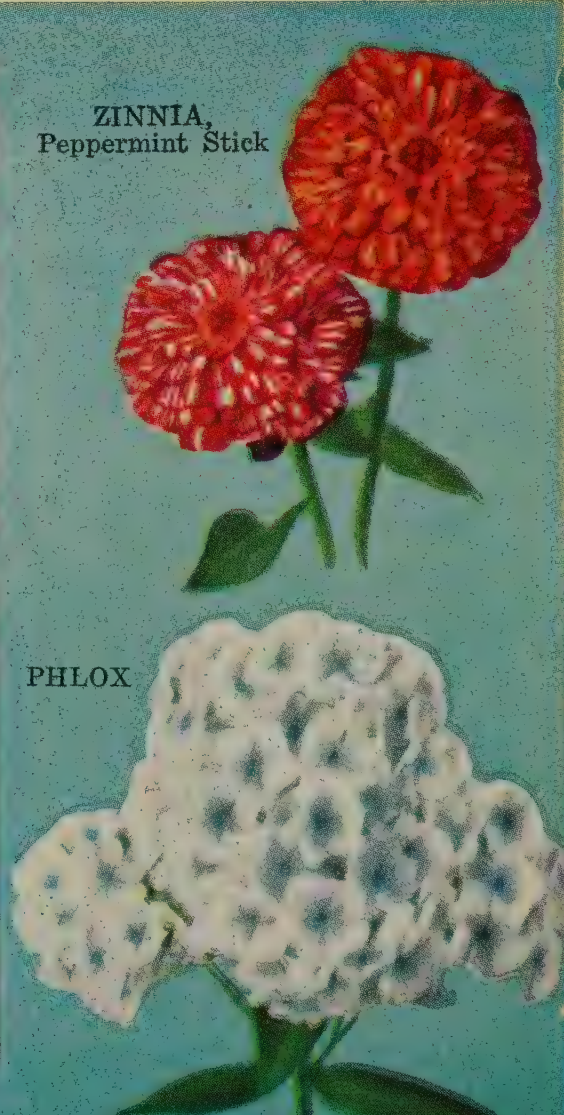
PETUNIA,
Fire Chief



SWEET PEAS, Cuthbertson



LINARIA, Northern Lights



ZINNIA,
Peppermint Stick

PHLOX

CULTURE

*... How to grow all flowers
listed in this Garden Annual*

The numbers, I to VIII, found with every flower listing refer to the following culture notes which give directions for growing all of the flowers we list.

One of the important problems in the garden is that of maintaining a continuous show of bloom. This calls for the use of several different types of annuals, such as those that must be planted early to grow in cool weather (**Culture IV**) and those which bloom later in summer heat (**Culture I** and **II**). If some of the cool-weather annuals from **Group IV** are sown in mid-summer and kept well watered, they will grow slowly until the cooler days of fall start them into more active growth. These will produce late flowers. Quick-growing annuals from **Group II** may also be sown at intervals for a succession of bloom during the summer.

One way to lengthen the blooming period of annuals is to cut off all flowers as soon as they fade. Annuals complete their life span when seed is formed and frequently stop flowering as soon as the seed ripens. By preventing the seed from forming through removal of all old flowers, the plants are kept growing and blooming.

Culture I

These flowers need a long season and must be started indoors if a full blooming period is to be had. If early bloom is not important, they will bloom later in the summer when sown directly in the garden. Some gardeners sow both ways to obtain a succession of flowers.

When starting seedlings indoors, select a place with plenty of light. North or shaded windows may be too dark for best results. Cold frames are generally very good. The seed is planted in small boxes (or flat) that have good drainage and will fit the space you are going to use. Fill them with a mixture of $\frac{1}{3}$ good soil, $\frac{1}{3}$ sand and $\frac{1}{3}$ humus such as peat. Press the soil down firmly and make small rows with the edge of a ruler or lath and slowly shake the seed from the packet into the rows. Sift a light covering of the soil mixture over the seed and moisten with a fine spray. Keep soil moist until the seeds have sprouted. Very fine seed such as that of petunias should be dusted carefully onto a smooth soil surface and covered with a pane of glass. Shade it with newspaper until the seeds sprout. These are best watered by setting the flat in a pan of water until the soil has become thoroughly dampened all the way through. When the seedlings have formed the second true leaves, transplant them into other flats so the plants are about $2\frac{1}{2}$ inches apart. This will give them room to grow to good size before being set out. Expose gradually to outside conditions and plant outside after the weather is warm and settled. When sown outdoors, follow directions under **Culture II**.

Culture II

These are the quicker-growing annuals that can be sown directly in the garden and will bloom in time to make a good display for most of the summer. If wanted especially early, they should be started as directed under **Culture I**. Some flower seedlings are rather delicate. Extra care in preparing the seed bed will pay dividends in better plants.

Prepare soil with a liberal amount of mixed fertilizer and organic matter and dig it in. Rake the surface until it is smooth and pulverized. Sow the seed at a depth equal to three times the diameter of the seed. Fine seed can be spread on the surface and pressed in without covering.

Keep soil moist by light spraying until the seedlings have formed the first true leaves. When they are large enough to handle, they may be transplanted to other parts of the garden.

Culture III

These flowers do not transplant well. They should be planted where they are to bloom.

Sow as soon as the weather begins to warm in the spring. **Otherwise the culture is the same as II.** Sow seed thinly or remove the smaller plants after they are up. These can be handled as pot-grown plants as in **Culture VII**.

Culture IV

These flowers are usually hardy annuals that can withstand very cool weather. They are often sown late in fall so they can start growing the first warm days of spring. If not sown in fall, they should be planted as early in the spring as possible. Fall sowing gets the seeding job out of the way before the spring rush.

Culture V

These flowers, while garden subjects, are also useful for winter-flowering house plants. **For garden use, handle as in Culture II.** For winter flowering indoors, plant fairly late in the season and transplant into small pots as soon as they are large enough. Keep moving them to larger pots as roots fill the soil until they are finally in six-inch pots. Annuals in pots should have at least six hours of direct sunlight daily if they are to flower. in the spring or in early summer when the rush of spring work is over. A cold frame or sheltered bed which can be shaded from the direct sun is best. Prepare soil thoroughly with plenty of organic matter. A loose friable soil will produce a thick mat of roots so that the seedlings will transplant more easily. Perennial seedlings are rather weak growers needing extra care. In covering the drills in which the seeds are sown, use either pure, clean sand or a mixture of half sand and half peat. This prevents packing of the soil over the seeds. Always water with a fine spray.

As soon as the second leaves form, seedlings may be transplanted into their permanent position. Or, if more convenient, they may be left in the seed-bed until the following spring. Under this culture, only a few species will bloom the first year and they will not produce normal flowers until the following year. Planting earlier does increase the chances for flowers the first year. But, if it is more convenient, **Culture I** may be used.

Culture VII

These varieties need a longer growing season than can be given them outdoors. And because they do not transplant well, they must be started in pots set out without disturbing the roots. **Otherwise Culture is the same as I.** The use of plant bands allows you to set the seedlings out without disturbing the roots. The bands soon rot away and the seedlings will grow as though started in the garden.

Culture VIII

These flowers are biennials. They make a leafy growth the first year but do not flower. The leafy growth of the first year forms food for blooming the following year. The flowers appear the second year and then the plant dies.

This means that a continuous show from biennials must be provided by starting new plants every year to replace those that are flowering. Biennials are handled in the same way as perennials except that they are started early in the spring to allow the plant to store as much food as possible for the next year's bloom.

Many gardeners start biennials in the vegetable garden or special starting bed and then transplant the ones needed to the flower garden the following spring. During the winter, biennials should be given the same treatment as perennials.



ESCHSCHOLTZIA—California Poppy

(a) Culture III, 1'

Large single poppy-like flowers in many showy colors. Fern-like leaves.

EVERLASTING FLOWERS

(a) Culture II, 1½-3'

Mixed—Contains such favorites as Strawflower and Globe Amaranth. Fine for dried bouquets.

FOUR O'CLOCK—Mirabilis

(a) Culture III, 2'

Bushy plants covered with flowers of red, pink, white, violet, and yellow. Flowers close in bright sun. Pkt. 15c.

FOXGLOVE—Digitalis

(b) Culture VIII, 3'

Tall spikes of lovely thimble-shaped flowers of pink, rose, and purple. Beautiful blooms second year.

GAILLARDIA—Blanket Flower

(a) Culture II, (hp) VI, 2'

Single, Mixed (a)—Large daisy flowers in many brilliant colors. Pkt. 15c.

Double, Mixed (a)—Double flowers in wide range of colors. Pkt. 15c.

Picta (a)—Showy round flowers with tubular petals. Many colors. Pkt. 15c.

Monarch (hp)—Superb daisy type flowers in shades of red and yellow.

GODETIA—Satin Flower

(a) Culture I or II, 2'

Double, Mixed—Azalea-like flowers of many colors on bushy plants.

GOURDS, ORNAMENTAL

(a) Culture III, 12'

Mixed—Large and small kinds that will be useful for dried novelties.

GEUM

(hp) Culture VI, 1½'

Mrs. Bradshaw — Glowing Scarlet flowers. Bright green foliage. Pkt. 20c.

GYPSOPHILA—Baby's Breath

(a) Culture I, (hp) VI, 1½-3'

Annual White (a)—Open, bell-shaped blooms on branching stems give airy touch to garden or bouquet.

Annual Pink (a)—The small flowers are a rosy pink. Like above.

Perennial white (hp)—Large loose clusters of small flowers give misty effect. Excellent for cutting.

HELIANTHUS—Sunflower

(a) Culture II, 6'

Sun Gold—Large double flowers of a brilliant golden yellow. Pkt. 15c.

HIBISCUS—Rose Mallow

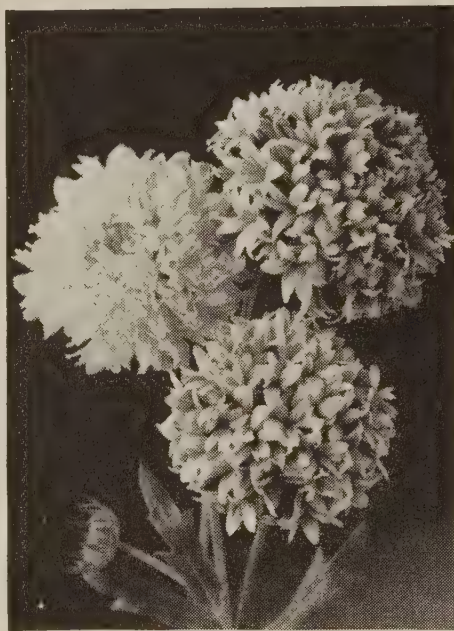
(hp) Culture VI, 4'

Giant mixed—Huge bell-shaped flowers in white, pink, red. Tall plants for damp spots. Pkt. 15c.

HUNNEMANNIA—Mexican Tulip Poppy

(a) Culture III, 1½'

Sunlite—Soft yellow double poppy type flower. Bluish fine cut leaves. Different and effective. Pkt. 15c.



GAILLARDIA

HOLLYHOCK

(hp) Culture VI or VIII, 5'

Double mixed—Large double flowers on tall spikes. Bloom in midsummer.

KOCHIA—Burning Bush or Summer Cypress

(a) Culture III, 2½'

Compact pyramid. Needs no trimming. Bright green foliage makes neat, quick hedge. Turns bright red in fall.

LARKSPUR—Annual Delphinium

(a) Culture II or IV, 3'

Blue Spire—Tall spikes of large double flowers in a violet blue. Pkt. 15c.

White King—Pure glistening white spikes. Tall and stately. Pkt. 15c.

Pink Perfection—Lively light salmon pink. Glorious when cut. Pkt. 15c.

Regal Lilac—Clear lilac with green buds. Tall with fat spike of large florets. Pkt. 25c.

Regal—Rose color. Long, thick spikes with exceptionally large florets. Vigorous and early. Pkt. 25c.

Ruby—A genuine ruby red. A bright color in garden or bouquet. Pkt. 15c.

Giant Imperial mixed—A fine mixture of the above and others. Pkt. 15c.

LAVATERA—Annual Mallow

(a) Culture II, 2-3'

Loveliness—Large bowl shaped, rosy pink flowers all summer. Attractive bronzy foliage. Pkt. 15c.

LINARIA—Flowering Flax

(a) Culture III, (hp), VI, 1-2'

Scarlet (a)—Bright red flowers in a constant succession all summer.

Perennial Blue (hp) — Low bushy plant blooming from spring to mid-summer. Small, clear blue flowers in profusion. Pkt. 25c.

LINUM**Baby Snapdragon**

(hp) Culture I, II, IV or VI

Northern Lights—About 15" high. Brilliant colors. Excellent quick-growing, cutting flower. Pkt. 25c.

LOBELIA

(a) Culture I or V, 4"

Crystal Palace—Compact border plant with myriads of tiny bright blue flowers. For all low use. Pkt. 25c.

LUPINE

(hp) Culture III or VII, 3'

Russell's Mixed—Finest of all the lupines! Brilliant colors in long, strong spikes of pea-shaped flowers. Pkt. 25c.

MALLOW, ANNUAL—SEE LAVATERA
MALLOW, ROSE—SEE HIBISCUS**MARIGOLDS**

(a) Culture I or II,

Tall Types 1½-3'

Burpee Gold — Large carnation-like flowers in striking bright orange. Odorless foliage. Pkt. 15c.

Glitters—Clear yellow. Double. Bushy with long stem. Early. Pkt. 25c.

Guinea Gold—Large round flowers in a rich gold. Very popular.

Yellow Supreme—Light yellow, large flowers of carnation form. Pkt. 15c.

Sunset Giants—Huge dahlia-flowered strain. Lemon and gold. Pkt. 15c.

Crown of Gold—Golden flowers with crested center and broad collar of petals. Odorless foliage. Pkt. 15c.

Double Dwarf Types ½-1'

Melody—Foot high plants with loads of orange ball-like flowers. Pkt. 15c.

Royal Scot—Alternating stripes of red and gold. Very different. Pkt. 15c.

Spry—Compact plants with showy yellow flowers bordered with mahogany. Distinctive and showy. Pkt. 15c.

Sunkist—Compact plants with masses of golden orange blossoms. Pkt. 15c.

Scarlet Glow—Compact, with bright red, 2" blooms. Reddest of all. Strikingly different. Pkt. 15c.

Single Dwarf Types, 1-1½'

Flash—Plants have many 1¾" flowers in tangerine and red shapes. Grows about 18". Pkt. 25c.

Naughty Marietta—Open 2½" flowers are rich gold with maroon at base of petals. Fine for edging. Pkt. 25c.

Red Head—1948 All-America Award. Crested center of gold edged maroon, petals deep changeable red. Pkt. 25c.

MIGNONETTE—Reseda

(a) Culture III, 1'

Low grower with tiny, white blooms that are very sweet scented.

MORNING GLORY—Ipomoea

(a) Culture III, V or VII, 12'

Blue Star—(All American Winner) Sky blue with five deep blue mid-ribs forming a star. Early. Pkt. 25c.

Heavenly Blue—Sky-blue flowers on a tall, neat climber. Flowers close in bright sun. Exquisite on fences. In glorious blue. Pkt. 15c.

Pearly Gates—A shining white form of Heavenly Blue. Pkt. 25c.

Scarlett O'Hara—Large velvety scarlet flowers. Very showy. Pkt. 20c.

Mixed—Many lovely shades.

MOSS ROSE—SEE PORTULACA
MOURNING BRIDE—SEE SCABIOSA



HOME GARDENING GUIDE



How to Plant Roses

Give roses the best location possible. They want: well-drained soil; at least a half-day's full sunlight (morning sunlight is not especially desirable); shelter and protection from prevailing winds. They should not be too close to large trees. Prepare the rose beds in advance, if possible. Where the soil is good garden loam which has been under cultivation for some time and is well drained, so there is no standing moisture, the preparation is easy. Dig to twice the depth of a spade—about 24 inches. Mix thoroughly generous quantities of Manure and Bonemeal and two tablespoonfuls of Sulphate of Potash with soil in bottom of hole. Let stand and settle.

Summer Care

Giving your Roses close attention throughout the summer months can add a great deal to the enjoyment you get from them. Here are some of the things to be considered in growing the full-blooming beauties that are the pride of every gardener.

CULTIVATION—Throughout the summer, until September, roses should be cultivated regularly to destroy weeds and aerate the soil. The soil should never be allowed to bake. One method used to keep a crust from forming is the application of a peat or terra-lite mulch. This also helps conserve moisture. After a heavy rain, it is advisable to hoe and rake rose beds just as soon as the soil has dried sufficiently.

WATERING—Any watering should be thorough. Sprinkling is actually bad for your roses since it brings feeding roots to the surface and causes burning. Water early in the morning, preferably. This

way, foliage will be dry by nightfall, lessening the danger from mildew, a disease which likes the combination of cool nights and wet foliage. During extremely hot periods, it is a good idea to hose plants with a strong stream of water several times during the day.

DISBUDDING—Beautiful flowers for cutting may be had by disbudding. The central bud of a cluster is usually the best and by allowing only this bud to develop, you can enhance its beauty. This applies to Hybrid Teas and Hybrid Perpetuals. Polyanthas and landscape Roses need no disbudding. In cutting flowers, it is best to cut in early morning before petals start to unfold. Cut the stems two buds above the point where they branch from the main stem.

How to Plant Shrubs

Keep roots covered with damp sack or something similar and do not let them become dry. Spade ground deeply, digging large holes with perpendicular sides. Cut off broken or bruised roots and cut back top one-third to one-half. Plant slightly deeper than they stood in nursery. Tamp soil firmly around roots and fill top of hole with several inches of loose earth to serve as mulch.

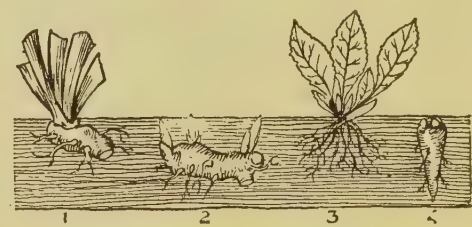
How to Prune and Plant Trees

With shade trees having a heavy top, at least one-third of the top should be removed. Prune to avoid crowding branches. Cut out some of the small branches, shorten back the side branches, but do not cut off the leader or main stem. Try to get well developed head, strong leader and branches at wide, not close, angles. Cut off all broken roots.

In choosing trees for the home grounds, study the house and the effect you want to produce. If the house appears tall or seems to stick up too much in the air, plant trees that will tower and spread over it, or trees that will shoot up tall and narrow and make it appear lower in contrast. If it is a low house it can be made to hug the ground or to appear higher by a judicious selection of trees.

How to Plant Perennials

The soil should be well worked and free of big lumps and air pockets. The average planting distance for perennials is one foot apart. Vigorous growers like peonies and mallows require as much as three feet apart. No. 1 plants (see below), such as iris, should be planted with the main root just below the surface of the ground. No. 2 plants, such as peonies, should be planted with the tips of the buds at or just below the surface of the ground. No. 3 plants, in which the leaves spring from the crown, should be planted with this crown on the level of the dirt line. No. 4 plants, such as hollyhocks, should be planted with the root straight down and the bud just below the surface of the dirt. Spread roots out naturally. Bring the soil in contact with all roots and press firmly. If the plants are watered, water the roots and not the tops.



MARIGOLD
Red Head



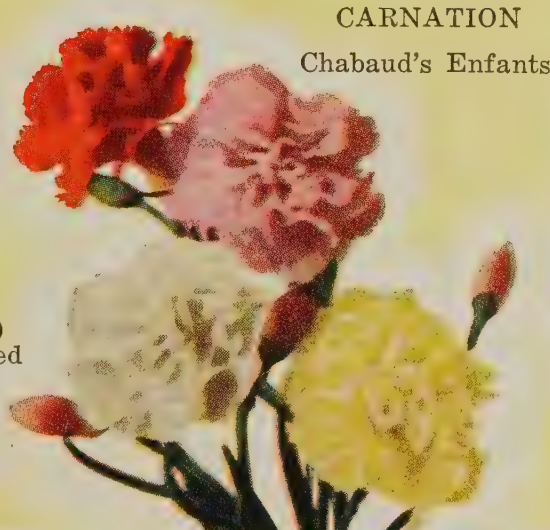
COREOPSIS
Double Sunburst



CENTAUREA
Imperialis



PINKS
(Dianthus)
Single, Mixed



CARNATION
Chabaud's Enfants



MARIGOLD
Butterball

NASTURTIUM

(a) Culture III or V

Dwarf or Bush Kinds 1'

Golden Globe—Semi-double flowers of bright gold. Pkt. 15c.**Scarlet Globe**—Fiery scarlet double. Old-fashioned beauties. Pkt. 15c.**Mahogany Gem**—Deep velvet mahogany red double flowers. Pkt. 15c.
Gem Mixed—All colors. Pkt. 15c.**Single Mixed**—Complete mixture of all colors of well-known single type.

Tall or Vine Kinds 3-10'

Golden Gleam—Large golden flowers Double and fragrant. Pkt. 15c.**Scarlet Gleam**—Fiery orange scarlet flowers. Double and fragrant. Pkt. 15c.**Salmon Gleam**—Delicate golden salmon double flowers. Pkt. 15c.**Glorious Gleam**—A mixture of all the colors of the Gleam series. Pkt. 15c.**Tall Single Mixed**—The old single type in the tall growers. All colors.**NEMOPHILA—Baby Blue Eyes**

(a) Culture II, 6"

Many cup-shaped sky-blue flowers on low spreading plant. Pkt. 15c.

NICOTIANA—Flowering Tobacco

(a) Culture I or II, 2-3'

Long-tube starry flowers. Fragrant at night. White or light pink mixed.

PAINTED TONGUE—SEE SALPIGLOSSIS

PANSY

(a) Culture I, II or VIII, 8"

Swiss Giants—Large flowering strain with fine range of gorgeous colors. Best of the improved pansies. Pkt. 50c.

TUFTED PANSY—SEE VIOLA

PERIWINKLE—SEE VINCA

PETUNIA

(a) Culture I or IV

Small Flowered, 10-14"

Balcony—Trailing kinds for use in window boxes and bedding. White, red, rose, or blue. Each. Pkt. 20c.**Blue Bee**—Violet blue. Pkt. 15c.**Cheerful**—Clear salmon pink with rose veining in throat. Pkt. 25c.**English Violet**—A fine purple-violet color. Spreading plant. Pkt. 20c.**Fire Chief**—Brilliant red. All-American Gold Medal Winner for 1950. The only flower to win this award in twelve years. Compact, and dwarf flowers profusely. Pkt. 35c.**Flaming Velvet**—A velvety blood red. Best of its color. Pkt. 20c.**Glow**—Rich carmine red flowers on a compact plant. Brilliant. Pkt. 25c.**Martha Washington**—Ruffled flowers of pale pink, violet throat. Pkt. 25c.**Rose of Heaven**—Best of the rose colored strains made famous by Rosy Morn. Color is slightly deeper and more uniform. Compact. Pkt. 15c.

PETUNIA, Glamour

Silver Medal—1949 All American Award. A lovely salmon. Good size flowers on compact plants. Pkt. 50c.
Large Flowered, 12-20"**America**—Double carnation-like flowers of a deep rose pink. Pkt. \$1.00.**Burgundy**—Huge single flowers of a rich wine red, white throat. Pkt. 25c.**Colossal Shades of Rose**—1948 All-American. Large plants have huge flowers of light and deep pink shades. Very double with many frilled and delicately fringed petals. Pkt. \$1.00.**Glamour**—Huge ruffled blooms of a luscious salmon. Early. Pkt. 25c.**Giants of California**—Huge flowers of many fine pastel tints. Pkt. 25c.**Little Giants mixed**—Compact plants with medium flowers in many new colors and shapes. Pkt. 20c.**Snow Storm**—Large plain glistening white flowers with creamy shading in throat. Very beautiful. Pkt. 50c.**Theodosia**—Large ruffled flowers of deep rose pink with golden throat. Very showy and lovely. Pkt. 25c.**PHLOX**

(a) Culture II, 8-12"

Lovely clusters of showy flowers on low plants from early spring on. Easily grown. Many splendid colors.

Separate colors, each, Pkt. 25c.

Mixed, Pkt. 15c.

PINKS—SEE DIANTHUS

PINCUSHION FLOWER—SEE SCABIOSA

POPPY

(a) Culture IV, (hp) VI, 1 1/2-3'

Gartford—Pastel mixture. Long stemmed. Very rich. A most unusual giant flowering strain of poppy. Pkt. 35c.**Iceland mixed**—Excellent perennial for borders, rock gardens. Large colorful, ferny foliage. Pkt. 15c.**Oriental Scarlet**—Huge red blooms in early summer from perennial root. Useful for bold color. Pkt. 15c.**Shirley, mixed**—The easily grown, lovely annual poppy. Many bright colors. Grows easily and self-sows.

POPPY, CALIFORNIA—SEE

ESCHSCHOLTZIA

POPPY, MEXICAN TULIP—SEE

HUNNEMANNIA

PORTULACA—Moss Rose

(a) Culture, III or IV, 6"

Jewel—Huge crimson flowers. Much larger than old kinds. Pkt. 25c.**Single, mixed**—Many brilliant colors.**Double, mixed**—All double. Pkt. 15c.

POT MARIGOLD—SEE CALENDULA

RICINUS—SEE CASTOR BEAN

SALVIA—Flowering Sage

(a) Culture I, 2-3'

America or Globe of Fire—The well-known Scarlet Sage that is a blaze of vivid scarlet in summer. Pkt. 25c.**Blue Bedder**—Deep medium blue. Slender plant for airy effect. Use to lighten up thick plantings. Pkt. 50c.**SALPIGLOSSIS—Painted Tongue**

(a) Culture III, 30"

Mixed—Large petunia-like flowers of rich velvety colors, veined with gold.**SCABIOSA—Mourning Bride, Pincushion Flower**

(a) Culture III or IV, 2'

Blue Moon—Large double flowers of deep lavender blue. Pkt. 15c.**Peace**—Round double flowers of pure white. Fine for cutting. Pkt. 15c.**Rosette**—Beautiful deep rose flowers with salmon shadings. Pkt. 15c.**Imperial Giants, mixed**—Large globe-shaped flowers in a wide range of red, white, coral rose and blue. Pkt. 15c.**Mixed**—All colors of the old type.

SATIN FLOWER—SEE GODETIA

SCARLET FLAX—SEE LINUM

SCARLET SAGE—SEE SALVIA

SCHIZANTHUS—Butterfly-Flower

(a) Culture II or IV, 1 1/2'

Mixed—Small flowers shaped like multi-colored butterflies. Delicate cut leaves. Free flowering. Pkt. 25c.**SEA LAVENDER—Statice**

(a) Culture I, 2'

Mixed—Small tubular flowers in colorful branching spikes. Pkt. 20c.

SPIDER PLANT—SEE CLEOME

STRAW FLOWER—SEE EVERLASTING FLOWERS

SHASTA DAISY

(hp) Culture VI, 2'

Alaska—Largest of the Shasta strains. Big, white flowers with yellow centers.

SNAP DRAGON—SEE ANTIRRHINUM

SNOW-ON-THE-MOUNTAIN—**Euphorbia**

(a) Culture III, 2'

Bright green foliage edged with white. Good for edging or contrast. Pkt. 15c.**STOCKS—Gilliflower**

(a) Culture I or IV, 1-2'

Giant Imperial—Excellent double flowers on tall stems. Many bright colors. Pkt. 25c.**Beauty of Nice**—Branching, with double, fragrant flowers. Pkt. 15c.**Dwarf Ten Weeks**—Low growing with strong spikes. Many fine colors.

SWEET PEAS

(a) Culture III, 3'

Early Spencer—Earliest of the many strains. Large colorful, fragrant blossoms. By variety or mixed. Pkt. 15c.

Late Spencer—Large fine flowers that flower in early summer. The standard ones for outdoor use. By colors or mixed. Pkt. 15c.

Cuthbertson—Hardy and heat resistant. Long-stemmed and rich colors. **Coline (Scarlet)** 15c—**Janet (White)** 15c—**Lois (Rose Pink)** 15c—**Danny (Navy Blue)** 15c—**Frank G. (Soft, rosy lavender)** 15c—**Mixed**—15c Pkt. **Ruffled Spencer**—Wavy and ruffled petals give fine effect. Many fine colors or mixed. Pkt. 15c.

Perennial Sweet Pea—Large vine and large flowers. Useful on trellis or fence. Not fragrant. Blooms all season. New stems yearly. Pkt. 15c.

SWEET SULTAN

(a) Culture II or IV, 2 1/2'

Mixed—Lovely colorful thistle shaped flowers. Very easily grown.

SWEET WILLIAM—Dianthus Barbatus

(hp) Culture VI, 1 1/2-2'

Double—Double flowers crown the heavy heads of many colors. Pkt. 15c. **Single**—Lovely single pinks in large flat clusters. Fine for cutting.

THRIFT—SEE ARMERIA

TICKSEED—SEE CALLIOPSIS

TITHONIA—Golden Flower of the Incas

(a) Culture I, 4'

Torch—All American Silver Medal 1951—Fiery scarlet. Compact, upright, bushy and small. Pkt. 25c.

TRITOMA—Red Hot Poker

(p) Culture VI, 3-4'

Pfizer's Hybrids—Narrow tubular flower on tall spikes, orange red. Graceful grassy foliage. Not perennial under some conditions. Pkt. 15c.

VERBENA

(a) Culture I, 8"

Lavender Glory—Lavender with white eye. Large. Fragrant. Pkt. 15c.

Mammoth White—Large heads of pure white. Fragrant. Pkt. 25c.

Scarlet—Flaming scarlet heads. Brilliant in beds. Pkt. 15c.

Blue Shades—Medium and dark blues in mammoth type. Pkt. 15c.

Mixed—Huge flower clusters, all colors. For beds and borders. Pkt. 15c.

VINCA—Periwinkle

(a) Culture III, 15"

Mixed—Colorful starry flowers on glossy-leaved, bushy plants. Does well in shady spots. Pkt. 15c.

VIOLA—Tufted Pansies

(hp) Culture VI, 6"

Mixed—Miniature pansies from neat plants. Flower all season. Many showy colors mixed. Pkt. 20c.

WALLFLOWER

(a) Culture I or V, 1 1/2'

Mixed—Blood-red and yellow flowers. Resemble single stocks. Early and delightfully fragrant.

WILD FLOWER MIXTURE

(a) Culture II or III 1/2-3'

Old fashioned flowers in a fine mixture for all season flowering. Sow thinly and enjoy continuous flowers and delightful surprises. These are not wild flowers of the fields but a selection of garden flowers that gives a "wild" garden look when planted in a border. A good way to get acquainted with some of the unusual kinds of garden flowers.

ZINNIA

(a) Culture I or II
SMALL TYPES, 12-18"

Black Ruby—Compact, round little flowers of a deep velvety maroon. Lilliput type. Pkt. 15c.

Red Riding Hood—Deep scarlet flow-

ers 1" across. Free flowering. Fine border plant of Lilliput type.

Lilliput pastels—Lovely soft colors in the miniature strain. Fine for borders or small bouquets.

Linearis—Single daisy-like type with small flowers in orange. Pkt. 15c.

Mexicana—Single and double flowers in varied and variegated colors.

Navajo mixed—Resemble Gaillardias in shape. Many colors in showy mixture. Medium size plants. Pkt. 15c.

Pumila Sunshine Tints—Dwarf plants with medium flowers in a wide range of delicate, soft colors. Pkt. 15c.

Scabious Flowered—Medium size flowers on a semi-tall plant. Resembles Scabiosa in shape. Bright colors mixed. Pkt. 15c.

Tom Thumb mixed—Lilliput type flowers on a very dwarf plant. For low borders and miniature displays. Pkt. 15c.

Fantasy—Medium tall plants with medium size flowers, shaggy petals.

Melody (orchid lavender), **Star Dust (golden)**, **White Light (white)**, **Wild-fire (scarlet)**, and **Mixed**. Pkt. 15c.

LARGE TYPES, 2-2 1/2'

Super Crown of Gold Pastels—New, improved, with many pastel colors overlying the golden base. Pkt. 15c.

Dahlia Flowered mixed—Huge flowers in a bewildering range of bright and pastel colors. Pkt. 15c.

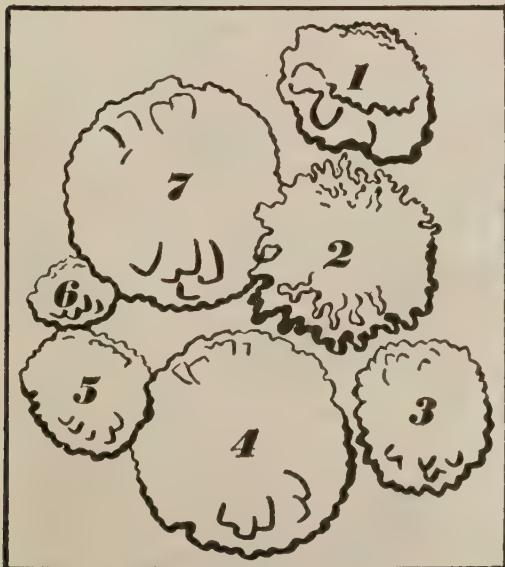
Giants of California, mixed—Mammoth flowers in many striking colors. Largest zinnias of all. Pkt. 15c.

Peppermint Stick—Basic red flowers with white or yellow stripes. Pkt. 25c.

Will Rogers—Dahlia type with deep scarlet color. Striking. Pkt. 15c.

**ALL PRICES
IN THIS CATALOG
ARE SUBJECT TO CHANGE
WITHOUT NOTICE**

A BOUQUET OF ZINNIA TYPES—One of the easiest of all flowers to grow, in a galaxy of colors and shapes, the Zinnia offers much to the gardener with a minimum amount of care. Reading clockwise they are as follows: 1 Harmony (no seed available this year), 2 Fantasy, 3 Pumila, 4 Double Giant, 5 Gaillardia flowered, 6 Little Red Riding Hood, 7 Early Wonder.



QUALITY



GEORGE KELLER & SONS

SERVICE

A Note on Proper Bulb Planting

Take special care to plant your bulbs the right depth, as shallow planting causes much failure in successful bulb growth. In preparing the planting pocket for your bulbs, be sure

the bottom is broad enough to permit the bulb base to rest on the soil. If an air pocket is left, the roots are quite likely to dry out before the bulb has started its growth.

Gladiolus are among the easiest of all flowers to grow. But while they stand neglect better than most plants, they also respond beautifully to proper treatment. So it is well to note these brief points: Soil should be well drained, sandy loam, preferably where no glads have been grown for the past 3 years. Cultivation to a depth of about 18 inches is highly desirable.

Full sun is best, although they do fairly well in partial shade. Glads may be set out as soon as frost is out of the ground, but extra-early planting gains little. A succession of plantings about ten days apart gives a long blooming season.

Depth of planting should be no more than 4" in heavy soil and 5 to 6" in light, sandy soil. Planting Glad bulbs too shallow in light soil will cause them to topple over or grow at bad angles. Space bulbs 3" apart in rows 18 to 30" apart. Be sure to eliminate air pockets under the bulbs.

Place bulbs in a well worked trench in staggered or zig-zag row—and cover at first with about two inches of loam. When shoots begin to appear, work balance of loam into the trench.

Watering is important. Glads need an abundance of moisture, especially after the plant is well developed.

Cut the spike when first bud fully opens. The other buds will open nicely and give you a longer period of bloom.

Cutting the spike as soon as the first flower opens allows the plant strength to go into the corm.

These spectacular foliage plants are particularly valuable because they do well in shade. Start them in a mixture of half sand and half leaf mould at a temperature of over 70 degrees. When the roots are well-developed and the shoot is beginning to show, pot up in rich soil. Set out in the garden when weather is warm.

Even the swamp lilies will not tolerate wet feet; all must have perfect drainage. Yet they like a moist, cool soil. This means that liberal quantities of old well-decayed compost is almost essential for lilies.

While cannas will tolerate cold soil, they usually do not start growing until hot weather comes. If planted in round beds, you will need 37 plants for a 10 foot bed (18 plants on the outside, 12 in the second row, six for the third row and one in the center). A 7 foot bed will use 19 plants, with 12 plants on the outside row, six for the middle row and one plant in the center.

Picardy

1"							
2"		ANEMONE	BULBOUS IRIS	CROCUS	SNOW DROP	GRAPE HYACINTH	TULIP
3"							
4"							
5"							
6"							
7"							
8"							

Usually accepted planting depths under proper soil conditions

Gladiolus thrips, mice, moles and rabbits are all enemies of your bulbs.

Leafhoppers carry disease and injure the plant by sucking the juice from leaves and stems.

Thrips can destroy your bulbs, even when stored. Ask us about our many good preparations to control these pests.

Any reasonably careful gardener can grow dahlias easily and successfully.

Soil needs of dahlias are no different than those of a good vegetable garden. Drainage and porosity are important.

Fertilizing calls for nothing more than a good balanced commercial fertilizer.

Planting is simple. Set stout stakes first. Plant the tuber in a hole 6 inches deep, with eye up, and neck near stake. Cover with just enough soil to hide the tuber. As the eye grows, keep filling in soil.

Culture. Cultivate frequently for about the first 10 weeks. Do not cultivate when flowers are in bud or bloom.

Allow only one main stalk to grow. When stalk is about 10 inches high, pinch out the center just above the 2nd pair of leaves. When buds appear, pinch out all except the central one. Also pinch out all new lateral shoots except the two nearest the main stalk. This helps produce large blooms on low, bushy plants and encourages long stems.

CALADIUM—Modern decorators are using House Plants more and more for their decorative plans—Fancy Leaved Caladium is a natural for Home Beauty.



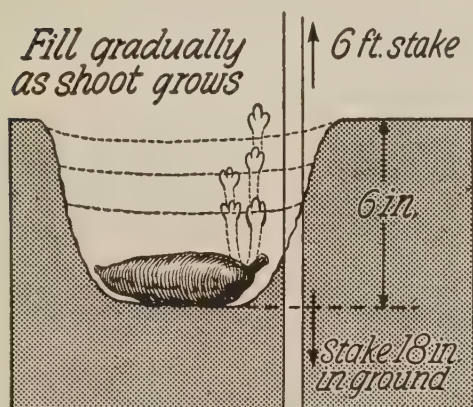
BULBS & TUBERS

For Spring Planting



PLANTING DAHLIAS

Dahlias need warm feet, as planting should be done when there is no danger of freezing. Handle your dahlias carefully, as bruised spots will decay. Soil should be dug out 8" below the planted position of the tuber. Mix this soil with sand and humus. Be sure to keep manure and humus from direct contact with the tuber. Drive your growing stake into the ground before laying the tuber in position; see illustration. Start tying to the stake when about 12" to 14" high. Mound the earth slightly against the stem. A ring of loose earth around your plant will assist in holding water in immediate relationship to the roots.



FEED YOUR BULBS

Fertilize and water your bulbs after they have flowered. After flowering the leaves make food which forms next year's flower and builds up the bulb to support it. The bulb is a tiny flower wrapped up in a lot of food. So be sure your bulbous plants have plenty of fertilizer and water while the flower is being formed for next year.

And remember, too, that early digging or cutting the leaves before they are brown will weaken or kill the bulbs by removing the source of food and energy.

STORING GLAD BULBS

Bulbs can be dug for storage seven weeks after last flower fades, but the longer digging can be delayed the better the bulbs will keep, unless fall rains may start up growth after a summer dry spell. Bulbs must be dug before ground freezes.

Store as close to 33 degrees as possible until February 1st. Then bring into warm room (above 55 degrees) for two weeks and return to 33 degree storage until planting time. ALL

GLADIOLUS

King Lear—Clear deep reddish purple with silver line on edge of petals.

Margaret Beaton—Huge snowy white florets with a very small vermilion.

Margaret Fulton—Medium. Clear soft rich dark salmon. A beautiful shade. 6 to 8 perfectly placed medium sized florets open at a time.

New Europe—Large. Vivid orange red with a small purple stripe in throat. 8 to 10 magnificently shaped florets open at a time.

Phyllis McQuiston—Large. Large deep glowing shrimp pink shading a little lighter in throat. 6 to 8 large blooms open on a tall spike.

Picardy—Giant. Soft shrimp pink, with a blotch of light flesh pink shading to shrimp pink at edges.

Spotlight—Large. Clear deep yellow with small scarlet blotch in throat. Opens 6 to 8 florets on a long stem.

Vagabond Prince—Large. An iridescent garnet-brown, lighter in upper throat, and with a small blotch of glowing flame scarlet on lip petal. 8 glowing flame scarlet on lip petal.

White Gold—Giant. Very large clear light cream shading to a golden shade in throat. 5 to 6 huge well placed blooms open on a long head.

Bagdad—Smoky old rose, deeper at edge of throat, lighter in throat. 6 to 8 immense blooms open at one time.

Beacon—Clear bright scarlet, with large creamy throat blotch. 8 to 10 medium florets, moderately ruffled.

Bit o' Heaven—Very nice orange with yellow throat. Opens 9 to 12 medium sized blossoms on tall spike.

Blue Beauty—Light blue, edges of petals lined with violet-blue. Throat somewhat lighter on upper petals.

Dream o' Beauty—Large rose red. A very popular shade. Tall grower.

Elizabeth the Queen—Clear mauve-ruffled flowers with dark lines in the throat. Large.

Ethel Cave-Cole—Light pink with deeper pink throat. Large, wide open florets. Fine propagator.

Gold Dust—Large. A fine soft clear early yellow. Opens 5 to 6 blooms at a time. A beautiful cutflower.

Hawkeye Red—Large. Red Sport of Vagabond Prince. A bright red with small blotch of darker red on lip petal. 8 to 10 well placed large sized blooms open at a time.

Leading Lady—Cream white. Very large florets on tall spikes.

DAHLIAS

(I.D. Informal Decorative.
F.D. Formal Decorative)

A. D. Livoni—(Show type) Beautiful shade of deep pink, free flowering and ideal for cutting.

Avalon—(F.D.) A fine garden variety. Profuse bloomer with rich large lemon-yellow blooms.

Commando—(F.D.) Clear shade of deep lavender. One of the finest.

Gallant Fox—(F.D.) Brilliant dark red. A good commercial variety.

Dixie's Wine Dot—(I.D.) A beautiful variegated flower. White, speckled and splashed with wine red. Showy.

Jane Cowl—(I.D.) Lovely buff and old gold shading to a salmon center. One of the best for cutting.

Jersey's Beauty—(F.D.) Glorious clear pink. One of the finest ever produced. Marvelous for bouquets.

Mrs. I. de Ver Warner—(F.D.) A beautiful orchid pink. Lovely large flowers on long strong stems.

Michigan White—(Semi-Cactus) Pure white. The most prolific blooming cutflower white.

Miniature Dahlias—Lovely 3- to 4-in. blossoms just like the large ones in form and shape. All have good stems. A wide range of colors.

Pompon Dahlias—Charming "button" dahlias that require little care. Gorgeous cut flowers.

Rosy Dawn—(Ball type) A beautiful red-rose and yellow.

CANNAS

King Humbert—(Orchid-flowering). Orange-scarlet with bright red markings; deep bronze foliage. 4 feet.

President—Immense bright red in large clusters. Green foliage. 4 feet.

Hungaria—Large dainty rose-pink, frequently edged cream. 4 feet.

Wintzer's Colossal—Largest flowering. Vivid, blazing scarlet.

CALADIUM

Fancy-Leaved—Rich ornamental leaves marked, veined and striped with white, pink and dark red.

Elephant's Ear—One of the largest ornamental plants for beds and borders. Huge green leaves.

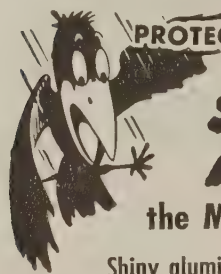
LILIES

Few flowers provide such regal beauty as lilies, and few are as hardy. Let us suggest the varieties that will thrive in your garden.

TUBEROSES

One of the most fragrant of all flowers. Tall spikes of white blooms.

GARDEN AIDS by PORTCO



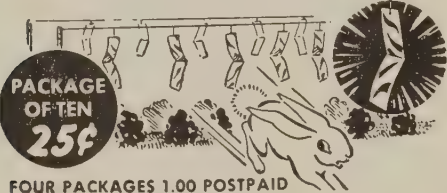
PROTECT YOUR GARDEN
WITH

SCARE- AWAY

the Modern Scare-crow

Shiny aluminum strips crackle and flash. Keep birds or animals away day and night. Lasting protection for gardens and farms. Simple to use. Ask your dealer or order direct.

10 Strips to a package\$.25
Commercial pack of 100 strips\$1.80



PORTCO Cinch-ties

FOR QUICK TYING

PORTCO CINCH-TIES are Wire Center Plant ties. Durable and attractive green color. In 8-inch lengths or handy ball of 250 and 500 ft. Cut to desired lengths for quick tying. For flowers, vines, annuals.

100 8-in. for.....\$.25
250 ft. for.....\$1.00
500 ft. for.....\$1.75

Inquire about bulk put-ups.
SEE THEM at our store

PORTCO Garden Twine

WEATHERIZED!
NO SHRINK • NO SAG!

Durable, extra strong PORTCO Garden Twine is specially treated for weather resistance... lasts more than a full season... no shrink or sag. The ball is wound for convenient center pull...will not unravel.

250 ft. for 30¢
500 ft. for 50¢

SEE THEM at our store

GARDEN SUPPLIES

We can't even begin to show you, here, all the helpful garden supplies our store offers! We have just about anything a gardener would want—including some new ones you've never seen before. But remember this—every garden supply item we offer has been chosen on merit! Our selections are sound and sensible. We choose, on the basis of experience, the garden aids that will really help you. That's why you can always shop with confidence here.

GARDEN GLOVES

Garden Gloves—Protect your hands—wear gloves in your garden! Canvas or leather, in sizes for men and women.

GARDEN HOSE

Visit Our Store for our newest offerings. Garden hose is now available in good quality and quantity.

LABELS

Pot or Garden Labels (Wooden)—Used for marking plants in pots or seed flats. 4 inch, 6 inch, 12 inch.
Wood Tree Labels, Wired. Painted wooden labels equipped with wires, for marking trees or shrubs; also used extensively for labeling dahlia tubers.

PLANT BANDS

Square bands hold almost twice the number of plants as round pots of the same size. 2 in. size, packet of 30, 25¢. (Ask for prices on larger sizes and quantities.)

PLANT SUPPORTS

Bamboo Stakes—Green, pencil-thickness. 2 ft., 3 ft., 4 ft.
Dahlia or Garden Stakes—Wooden—Painted green. Strong and durable. Almost rot-proof. Will last several seasons. For supporting dahlias, young trees, etc. 4 ft., 5 ft., 6 ft.

POTS AND SAUCERS

Standard Earthen Flower Pots. Many sizes, from 2½ in. to 12 in. diameter.
Earthen Flower Pot Saucers. 3 in. to 12 in.
Red Paper Pots. Excellent for growing seedlings or for packing plants for shipment. 2½ in. to 6 in. diameter.

BIRD HOUSES AND FEEDERS

Window Bird Feeders—Provides an opportunity to study your bird companions from your window. Ideal for shut-ins and a real companionship for any bird lover.
Bird Houses—A great deal of pleasure can be derived from the birds that will be attracted to your yard by putting out a bird house or two. We carry many types and styles for bird lovers to choose from.

WILD BIRD SEED MIXTURE

Feed your feathered friends the year round with this tempting mixture. All types of wild birds relish this seed. Don't forget to give them plenty in the winter months.

Centro NEEGARDS fit all knees

Guaranteed to give perfect kneeling comfort

Finest, handiest of all knee protectors! Reinforced sponge rubber, easy fasteners, make it a joy for gardening or household chores. FOR WOMEN OR MEN.



No more roughened knees! Kneel with comfort and with ease! A wonderful buy for \$2.00.

Hotkaps

Start Your Garden Earlier This Year—with HOTKAPS

Give your favorite flowers and vegetables an earlier SAFE start! *Glastex** HOTKAPS afford individual outdoor HOTOUSES for seedlings and young plants. Ripen plants weeks earlier, provide positive protection against frost, storms, sun, insects. Only *Glastex** HOTKAPS give 3-Way Protection: **1. TRANSLUCENT** to retain healthful benefits of sun, prevent direct burning rays that wilt tender plants. **2. Become more POROUS** as plant develops, hold less heat and moisture condensation gradually hardening plant to withstand shock when removed! **3. QUICKLY OPENED AT TOP** for ventilation as plant grows—still giving most important protection to tender undergrowth at BASE.

*GLASTEX specially processed material Reg. U.S. Pat. Off.

HOTKAPS Plant Protectors
Made of *Glastex** only **3 1/3**

BIG GARDEN PACKAGE of 25 only 85¢—Setter Free
Larger Pkgs. of 100, 250, 1000 for Commercial Growers

'TWIST-EMS'

Handy! Speedy! PLANT TIE

Strong, dark green "invisible" tapes with wire reinforcing—protect stems, speedily and permanently support annuals, perennials, vines, shrubs, and vegetables.

Box of 200, 4-inch size, 25¢.
Box of 100, 16-inch size, 50¢.
Pkg. of 50, 8-inch size, 15¢.
Pkg. of 35, 8-inch size, 10¢.
250 ft. continuous roll, \$1.00.

TRAIN-ETTS

Ideal support for SWEET PEAS, GARDEN PEAS, POLE BEANS, CUCUMBERS, TOMATOES. Hung in 5 minutes. Doesn't rot like string, nor burn tendrils like wire. 3 sizes —

60-inch x 72-inch, 65¢
60-inch x 96-inch, 85¢
60-inch x 180-inch, \$1.25

Centro 6 IN 1 CENTROSpray

Sprinkler and duster all in one! Two heads—one for watering plants with gentle rainlike spray... the other for dusting insecticides. Good indoors or out. Users say it's its indispensable! Try it!

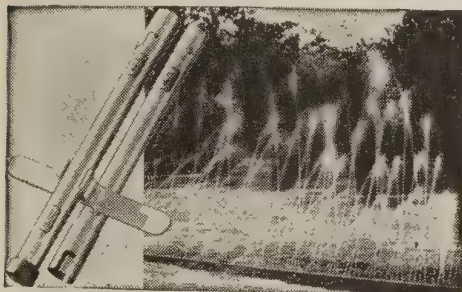
You'll wonder how you ever got along without it!

NEW FEATURE — 2 SPRAYHEADS
FOR DUSTING POWDER FOR SPRINKLING WATER

WORKS 6 WAYS! A great help in ironing and other household and garden chores. Just try it! 8 oz., \$1.25; 12 oz., \$1.80.

GARDEN TOOLS

Garden tool design has moved ahead almost unbelievably in the last decade. Some of our recently developed garden tools let you do as much in one hour as you formerly did in five! Others make play out of jobs that have always been backbreakers. Hoeing, cultivating, weeding have been streamlined and speeded up amazingly. So—next time come in, spend a few minutes in our Tool Department. You'll be glad you did!



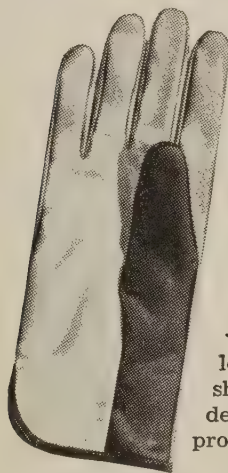
NATURAIN

From 2-inch trickle to 25-foot spray, at will! April showers anytime of year—with this marvelous new method for watering lawns and gardens. No constant shifting . . . no water waste. Connects in a jiffy. Comes in 5 foot units, weight only 12 oz. Use 5 ft. to 30 ft., according to size of your garden. Primary unit, \$2.95; extension units \$2.75 each.

BEMIS EROSIONET



Prevent seed washouts, grow beautiful lawns and terraces with one seeding by using this open-mesh woven paper fabric to hold seed and soil in place.



"Green Thumb"

They really do have a green thumb and they're vinyl - impregnated to keep out dirt, wear several times longer, wash without shrinking. Every gardener needs a pair to protect her hands.

Sizes small, medium and large **89¢**

PRICES

subject to change

As is usual in seed catalogs, we must notify you that prices are subject to change without notice. We shall, of course, make every effort to maintain our listed prices.

GARDEN SUPPLY PRICES NOT PREPAID

While prices quoted on garden seed include our shipping costs, this is not the case on our other lines. So, when ordering garden supply items by mail, please remember shipping costs are EXTRA.



Cultivators, Speedy—4 sharp curved tines, 4 1/3 ft. handle.

Norcross—Adjustable steel teeth.

Hand Cultivator Weeders — 3 or 5 prong.

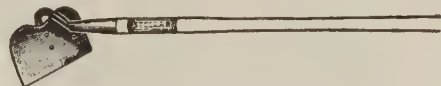
Forks, Spading — 4 tines, D handle, light and heavy weight.

Hay Fork—Bent handle, 3 or 4 tines. Hooks, Grass (Sickles) — Various styles, well balanced designs. Wood handles.

Potato Hooks—4 broad tines, tumbled.

Shears, Grass—Pinch-proof handles.

Hedge Shears—8 or 9 in. blades.



Hoes, Field or Garden—Various styles.

Onion Hoe—Square top pattern.

Scuffle Hoe — 8 inch blade; straight handle.

Warren Hoe—Pointed steel head.

Knives, Asparagus—10" with V-shaped point.

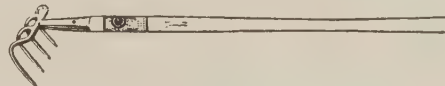
Budding, Propagating, and Pruning Knives. See our selection.

Edging Knife—Half-moon blade.

Scythes, Grass, Weed and Bush—Best crucible steel. Visit our display!

Shovels, Square Point—Long and D handles.

Round Point Shovel—Long D handle.



Rakes, Steel, Curved Tooth—Straight handles; teeth on head 1/4" thick.

Steel, Straight Tooth Rakes — Level head.

Wood Rakes—Rigid and strong.

Bamboo Rakes—Fan shaped, strongly made.

Steel-Broom-Rake — Flat, spring-steel teeth.

Pruners, Tree—8 ft., 10 ft., 12 ft.

Pruning Shears—Again available in several styles.

Flower Gathering Shears — They cut the stem and hold the flower for you.

To take better care of your lawn and garden—



GARDEN HOSE ACCESSORIES

You'll get exactly the right garden hose accessory for your special need when you ask for Green Spot . . . America's most complete high quality line of sprinklers, nozzles, hose menders, couplings, clamps, etc.

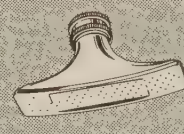
WEATHER-MATIC's the new queen of automatic sprinklers!

Polished chrome arms feature ball bearing action that assures smooth, silent rotation. Adjustable nozzles have

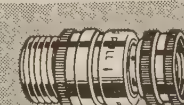
distance markings for watering any circular area from 10-50 ft. Rustproof. Moving parts brass.



HEAVY DUTY NOZZLE is machined from solid brass. Completely leakproof . . . finger-tip operation. There's none better.



FAN SPRAY waters plant roots alone . . . no wet leaves to develop fungi. Won't wash out topsoil.



QUICK CONNECTOR speeds joining of hose-to-faucet, hose-to-hose, hose-to-accessory. Its two parts snap together . . . no threads.

Green Spot

KEEPS THAT SPOT GREEN
A Product of Scovill

GARDEN TOOLS

(Continued)



Spades, Square Point—Flat Blade, D handle.

Trowels—All-Steel Garden—Made of one piece of rigid steel; shaped ventilated handle.

Transplanting Trowel — 6" blade of solid steel.

Weeders, Hand—3 steel prongs; short handle.

Lawn Weeder — Curved forged-steel blade.

Weeder and Hoe Combined—A labor saver.

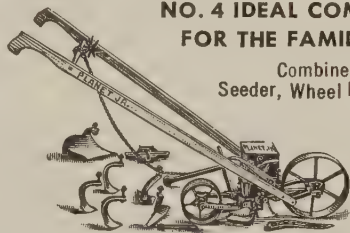
Dandelion Weeder—V-shaped design.

Planet Jr.

The Finest in the Field

AIDS TO BETTER, EASIER GARDENING

NO. 4 IDEAL COMBINATION FOR THE FAMILY GARDEN



Combined Hill and Drill Seeder, Wheel Hoe, Cultivator and Plow. An efficient all-around tool. Ideal for planting, weeding, cultivating and plowing.

NO. 17 SINGLE WHEEL HOE



You'll like it. Saves time and makes gardening easy. Light, but strong enough for any job. Has the most needed equipment.

PLANET JR. STAR PULVERIZER

Weeder, cultivator and mulcher all in one. It cuts on both forward and backward stroke. Light, easy to use, it does the finest kind of work.

NO. 2 GRASS EDGER

Built to work equally well on curved or straight walks. Gives you clean sharp lines along with minimum of effort.

Biting or Chewing Insects such as beetles, caterpillars, grasshoppers, and the like, can best be controlled by the application of poisons to the plants upon which they feed.

Sucking Insects such as aphids, weevils, leaf hoppers, etc., insert their beaks into the leaves, stems or fruits and suck the plant juices. Hence "stomach" poisons applied to the surface of the plant will not kill them. They must be killed by use of contact poisons.

Scale Insects that develop protective coverings are most easily killed by strong corrosive solutions, such as a concentrated lime-sulphur mixture, applied during late fall or winter when foliage is off the plants—and by other materials. We have the right remedies for all these insect types.

INSECTICIDES & FUNGICIDES

All-Around Spray (Acme) — Multi-purpose formula for roses, shrubs, fruit trees. This one spray does the job. (See Acme display for full data.)

Antrol Ant Traps—Kills both sweet and grease eating ants.

Arasan (Seed Treatment)—An effective dry seed disinfectant and protectant for destroying surface seed-borne organisms and protecting the seed against soil-borne organisms responsible for seed decay.

Arsenate of Lead—Controls practically all leaf-eating or chewing insects.

Black Leaf 40 — Nicotine Sulphate 40% solution for controlling aphids (plant lice), thrip and soft bodied sucking insects.

"Black Leaf" Aerosol Insect Killer—The new pushbutton aerosol that rids your home of insects.

"Black Leaf" Garden Dust—A multi-purpose dust or spray containing nicotine, pyrethrum and rotenone—plus a concentrated fungicide.

"Black Leaf" Rotenone Dust—1% rotenone and 10% sulphur blended on special carrier material.

Black Leaf 40 Mosquito-Fumer—New outdoor mosquito killer. Effective "smoke aerosol" deadly to mosquitoes.

Bordeaux Mixture—Standard copper insecticide for controlling black spot, mildew, blight, other fungus diseases.

Calcium Arsenate—Cheap quick-acting poison for potato bugs; leaf-eating insects.

2% Ceresan (Seed Treatment) — Reduces seed rotting and damping-off,

ALL THE PROTECTION MOST GARDENS NEED!

FOR A LUXURIANT GARDEN

on Roses and other flowers use

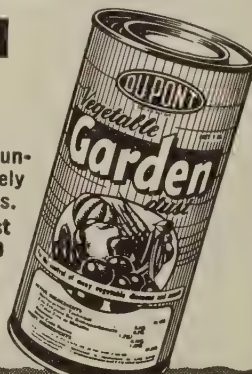
DU PONT FLORAL DUST



Gives all-in-one control of most insects and fungus pests — special Du Pont formulation.
Price: 8-oz. refillable dust gun . . . \$.79
1-lb. can . . . 1.15
4-lb. canister 3.50

on Vegetables use

DU PONT VEGETABLE GARDEN DUST



Stops insects and fungus diseases safely — won't burn plants.
Price: 8-oz. dust gun \$.79
1-lb. can . . . 1.15
4-lb. canister 3.50

Also these separate chemicals



FERMATE

for black spot of roses—also ideal fungicide for apples, grapes, berries.

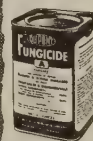
Price: 8-oz. canister—75¢



METHOXYCHLOR

insecticide for all major insect pests of flowers and vegetables.

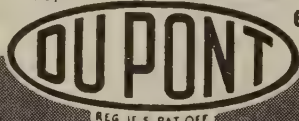
8-oz. canister—75¢



FUNGICIDE-A

for tomato blights and other foliage diseases of vegetables and flowers (except roses).

6-oz. canister—85¢



DU PONT GARDEN PRODUCTS

BETTER THINGS FOR BETTER LIVING
... THROUGH CHEMISTRY

gives more uniform stands with less seed.

New Improved Ceresan (Seed Treatment)—Kills seed-borne diseases, such as root-rot and seedling blight, by both contact and vapor. Use on barley, oats, wheat, rye, sorghums, flax, peas, cotton. **Chlordane Dust (Acme)** — The new control for a large group of insects in the lawn, garden, and indoors. See below for list of pests it will kill.

Du Pont Floral Dust—Contains methoxychlor, and rotenone. Especially recommended for rose disease control; protection against insects.

Duradust—A ready-to-use dust for home gardens, contains 5% DDT and 9% metallic copper. Particularly effective on rose chafer, leaf hopper and corn ear worm.

End-O-Pest (Swift's)—All-around garden dust in a refillable sprayer package which sprays or pours.

Fermate (DuPont's)—Highly effective control for rose black spot, powdery mildew, and rust—also for many diseases of other flowers, and for fruit diseases such as apple scab.

Fruit Tree Spray or Dust (Pratt's)—Provides safe, effective control of insects and diseases on fruit trees. Contains sulfur, DDT and basic lead arsenate.

Lime Sulphur, Liquid—A dormant spray material against scale of all kinds.

Lime Sulphur, Dry—A dormant spray to kill scale or use as a summer spray for control of fungus disease.

Methoxychlor (Du Pont's)—50% wettable powder. Because of its low toxicity, can be used on vegetables right up to harvest time.

Mildew Spray—Strong liquid spray for control of mildew, leaf spot and black spot on rose bushes, flowers.

Para-Scalecide (Pratt's) — Controls peach borers with one application. Saves time and labor. Safe to use on young and old trees.



Spray every fruit tree, shade tree, shrub and vine with Scalecide in the Spring before the buds start. 1 gal. \$2.75, 1 qt. \$1.15.



When insects appear, spray with D-X Insect Spray. Kills both sucking and chewing insects. Dilutes 1 to 600. 4 oz. \$1.00, 1 oz. 35¢.

ACME GARDEN DUSTS AND SPRAYS

Controls Most Common Garden Insects . . . Safe to Use

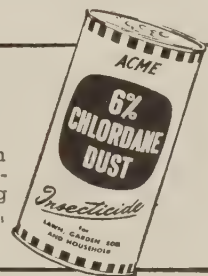
Acme Garden Guard controls the widest variety of chewing and sucking insects of any insecticide on the market today. Non-injurious to humans, pets and animals. Use as dust or spray to control aphids, bean beetles, asparagus beetles, horn worm, tarnish plant bug, cabbage worms, currant worms, rose caterpillars, blister beetles and other common insects. 1 lb. sifter \$5.50; 1 lb. pump gun, \$.65; also available in 4 lb. pkgs. and 50 lb. bags.



ACME 6% CHLORDANE DUST

Outdoors and indoors—for garden, lawn, house

For dusting in gardens and on lawns to control ants, cutworms, chinch bugs, chiggers, earwigs, slugs, snails, sowbugs, sod webworms, wireworms, white grubs, including Japanese beetle grubs, root infesting maggots and many others. In the home for cockroaches, silverfish, carpet beetles, crickets, etc. 1 lb., \$.55; 4 lbs., \$1.50.



SNAROL CUTWORM BAIT



The long-established favorite for killing snails, slugs, cutworms and sowbugs. Easily distributed in areas under plants where these pests lurk. Effective — attracts and kills them fast. Non-injurious to vegetation.

1 lb. 35c, 2½ lbs. 75c

ANTROL ANT KILLER SETS



These convenient sets contain four ready-filled glass feeders filled with Antrol Syrup. Wipes out entire ant colony quickly.

Set of four 39c

RIDZ GARDEN SPRAY



Contains D.D.T., Rotenone and Lethane. Kills thrips, aphids, leaf hoppers, white flies, mealy bugs, red spiders, scales and Mexican bean beetles. High dilution for economy.

4 oz. concentrate 65c

ACME ALL ROUND SPRAY



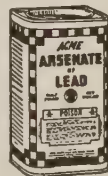
For roses, azaleas, other flowers, shrubs, vegetables and fruit trees. A new, modern, carefully formulated multi-purpose product designed to provide with one application the best available protection against both insects and fungi such as rose chafer, azalea flower spot, thrip, black spot, downy mildews, leaf spot, many rusts, Japanese beetle, leafhopper, flea beetle, aphids, cabbage worm and many others.

Suitable for dusting as well as spraying. 1 lb. Carton, \$1.10; 4 lb. Carton, \$3.50.

ACME TOMATO DUST



A general garden insecticide and fungicide with special emphasis on complete tomato protection. Controls early and late blight as well as horn worm, fruit worm and flea beetle on tomatoes as well as on cucumbers, beans, cabbage, potatoes and many flowers such as hollyhocks, asters, roses, azaleas, etc. 1 lb. sifter, \$.55; 4 lb. pkg., \$1.35; also available in 50 lb. bags.



ACME ARSENATE OF LEAD

The favorite arsenical insecticide for the control of most chewing insects damaging shade trees, vegetables, berry bushes, vines, etc. Has no superior for fluffiness and bulkiness. Safe to use on tender foliage.

1 lb. carton, \$.70
4 lb. bag, \$1.70

ACME BORDEAUX MIXTURE

The most widely used copper fungicide for preventing fungous spores gaining a foothold on plant surfaces. Prevents losses caused by blight, rot, mildew, scab, anthracnose, etc. Recommended for vegetables, flowers and ornamentals. Contains copper sulphate and lime in equal proportion for maximum protection and minimum burn.

1 lb. carton, \$.50; 4 lb. bag, \$1.35.

ACME DURADUST No. 50

Contains 50% wettable DDT in micronized form. Controls codling moth, oriental fruit moth, leaf hopper, flea beetle, psyllid, potato bug, potato aphid, Japanese beetle, thrip, cabbage worm, rose chafer and many others. Use as a spray, like Arsenate of Lead, or extend with inerts for dusting. Highest strength possible in quality processing. 1 lb., \$.85; 4 lbs., \$2.25; also available in 40 lb. bags.

INSECTICIDES

(Continued)

Paris Green—For control of chewing insects, particularly potato bugs.

Rabbit Scat—Keeps rabbits out of the garden, protects bushes and trees, repels birds from grape vines. A repellent, not a killer.

Red Arrow Garden Spray—Contains Pyrethrum, Rotenone, Soap. Harmless to animals.

Red Arrow Dust—Use as spray or wash for fruits, flowers, vegetables.

Special Semesan (Seed Treatment)—Effective in preventing and controlling both brown patch and dollar spot. Provides wide margin of safety with little danger of yellowing or thinning turf when applied as directed.

Semesan Bel—For use on potatoes. Controls many seed-borne diseases.

RED ARROW

GARDEN SPRAY

Non-poisonous. Kills most chewing and sucking insects quickly, safely. 1 oz. makes several gallons of spray.



1 oz..35¢; 4 oz..\$1.00; Pint..\$2.85

Ask for free booklet
How to Fight Garden Insects

RED ARROW

AGRICULTURAL DUST

¾%
ROTENONE!



Non-poisonous—spray or wash.
Kills bean beetles, cabbage worms,
etc. Dust about every 10 days.

2 lb.....60c — 5 lb.....\$1.35
50 lb. drum (1% Rotenone) 22c
per lb.

A PRODUCT OF **McCORMICK & CO.**

Insecticides & Weed Killers Becoming Highly Effective

The age-old battle with weeds and insects that has always confronted the gardener and farmer is becoming more and more one-sided in favor of the grower.

Chemical science, working hand in hand with agronomists has advanced from those early days of D D T and 2,4-D until today we have highly effective specialized dusts and sprays that practically insure better and higher yields with less labor and expense than ever before.

New 2, 4, 5-T Kills Brush

Latest of the hormone-type chemicals is new 2, 4, 5-T. This chemical is even more potent against broad-leaved weeds than 2, 4-D and is especially effective against hard-to-kill perennial weeds and brushy plants. If you want to get rid of poison ivy, poison oak, willows, sagebrush or similar brushy weeds, just spray or paint them with a 2, 4, 5 brush killer.

Multi-Purpose Sprays

From the home gardener's standpoint, perhaps the most important development in modern garden pest control is the combining of several of these chemicals into one multi-purpose dust or spray . . . so that many different kinds of pests can be controlled. All you have to do is to dust or spray regularly at seven to ten-day intervals . . . and you get control of most of the pests you'll find in your garden.

For the pests which do not yield to this treatment, science has provided many specialized sprays and dusts. These are all easy to use—and are available at your seed store—together with all the information you need.

Modern Weed Killing

When the rains come, weeds start coming up in the driveway and paths, along the curb, among the patio bricks, along the fence and garage, and in other places where you don't want any vegetation to grow.

You can now keep these places free of weeds easily and quickly—without the old-fashioned method of hand hoeing—simply by using a modern weed killer containing arsenic trioxide. This chemical kills weeds and also sterilizes the soil so no vegetation will grow for a year or two. You simply apply it to these places with a sprayer or an ordinary sprinkling can. An important feature to home owners is that the chemical is non-inflammable and can be used to reduce "dry-weed" fire hazards.

Modern Dusts

If you prefer to dust, you have several good multi-purpose garden dusts to choose from. These dusts contain balanced combinations of modern insecticides and fungicides—but may also contain reliable old-type chemicals such as sulfur.

An example of a good multi-purpose garden dust is one that contains two insecticides and two fungicides—the most important ingredient being, of course, the potent new insecticide, **lindane**. This multi-purpose dust controls certain sucking, insects chewing insects, wireworms and other soil insects; ants, earwigs, spiders; and also such plant diseases as mildew, black spot and rust.

Another example is a general flower and rose dust. This is especially formulated for your roses, other flowers, ornamentals and shrubs. It is a combination of several chemicals, two of which are lindane and DDT. This dust also is effective in controlling sucking, chewing and soil insects; ants, earwigs, and many plant diseases.

Modern Sprays

If you prefer to spray your flowers and other garden plants, there are modern multi-purpose garden spray sets and rose spray kits you can use. These consist of several bottles, each containing one of the modern insecticides or fungicides. You combine them in your sprayer according to the directions and you get multi-purpose control of both insects and fungus diseases.

In one such spray set, for example, you will find a bottle of modern insecticide spray, a bottle of the reliable older-type oil spray, and a bottle of copper fungicide spray for powdery mildew. In another spray set you'll find a bottle containing the newest of garden insecticides—lindane, and a bottle of a recently-developed fungus spray that has been doing wonders in controlling powdery mildew, rose rust and peach leaf curl. In addition, this particular spray set contains one of the new-type garden hose sprayers that is designed to make your garden spraying as easy as watering. You just connect the sprayer to the end of the garden hose and turn on the water to spray.

Modern Garden Baits

When it comes to controlling such garden pests as snails, slugs and cutworms, you have another improvement over the old-style meal baits in the modern pelleted-type of bait. The pellets contain metal-dehyde-arsenic poisons and give multi-purpose protection to the young, succulent growth of your garden plants.

Snarol—An insecticide bait to combat snails, cut worms, sow bugs, grasshoppers.

Sulphur, Dusting — For controlling powdery mildew, blight, black spot, rust and most rose diseases.

Sulphur, Wettable—An improved sulphur which can also be used as a liquid spray.

Vegetable Dust or Spray (Pratt's)—A combined insecticide and fungicide for vegetables and flowers, containing .75% rotenone and 7.0% copper.

Vegetable Garden Dust (Du Pont's)—An all-around insecticide containing the exclusive combination of methoxychlor, rotenone and zinc ethylene. See further data in DuPont Listings.

"Black Leaf 40" AND OTHER Black Leaf PRODUCTS

Black Leaf 40 kills aphids and similar sucking insects by contact and fumes. No burn. No stain. *Also delouses poultry.* Backed by 40 years of use.

Black Leaf Garden Dust contains nicotine, pyrethrum, rotenone and a fungicide for insect and disease control.

Black Leaf Rotenone Dust contains rotenone and sulphur blended on a special carrier material.

Black Leaf Aerosol Insect Killer kills household insects. *Push-button action.*

Black Leaf Warfarin Rat and Mouse Killer—the new rodenticide that destroys entire colonies. Tasteless to rats.

GROWTH AIDS (Plant Hormones)

IT'S FUN TO MAKE CUTTINGS FROM YOUR FAVORITE PLANTS ROOTONE®

The Plant Hormone Powder Used by Professionals

It's easy. Rootone stimulates the natural tendency to put out roots. Rooting is faster and heavier, resulting in bigger, earlier plants.

Trial packet, 25c • 2-oz. pkg., \$1
1-lb. can, \$5

DO YOU WANT LOVELIER FIRST YEAR BLOOMS? ROSETONE

Rosetone-treated plants take hold quickly and bear finer, earlier roses. Indispensable for the rose lover. Use Rosetone to soak bare-rooted plants before setting out, and to water established bushes.

½-oz. package, 25c • 3-oz. can, \$1

TRANSPLANTONE®

Reduces wilt and loss when transplanting

Vegetable gardeners: Cut down transplanting losses; give seedlings healthier roots. Get earlier, larger crops of tomatoes, finer cabbage, cauliflower, lettuce.

Flower gardeners: Use Transplantone when transplanting seedlings and shrubs, to get finer blooms, stronger growth.

½-oz. packet, 25c • 3-oz. packet \$1
1-lb. can, \$4

MORE TOMATOES!

FRUITONE®

Spray Fruitone at blossoming time and each plant will set more fruit and bear more big, meaty tomatoes. Spray Fruitone for bigger crops of beans and lima beans, too. The dollar package makes 25 gallons of spray.

2/5 oz. packet, 25c • 2-oz. pkg., \$1
12-oz. can, \$5

WEED KILLERS

Nowadays, it takes only two types of weed killers to do the whole job of weed eradication around most homes. 2, 4-D, the miraculous new selective killer (Weedone, End-o-Weed, Weed-no-more) will do nearly all the work without a bit of digging. You just spray it on! The only other control you need is a good crab grass killer. For more extensive weed problems other materials may, of course, be needed. We have these, too—and can advise you about their uses.

THE NONPOISONOUS WEEDONE® CRAB GRASS KILLER

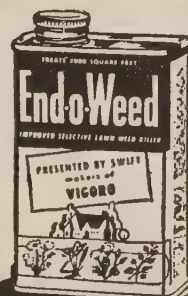
Contains potassium cyanate. Highly effective, but non-poisonous to humans and animals. Kills crab grass and chickweed, without killing bluegrass, clover or other deep-rooted grasses. Clean, economical and easy to use.

5-oz. can, \$1 • 20-oz. can, \$3
5-lb. can, \$8.85

USE End-o-Weed TO Spray WEEDS AWAY

• Destroys weeds, roots and all, quickly. Kills dandelion, chickweed, plantain and over 100 other lawn weeds.

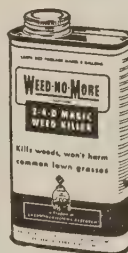
Presented by Swift



WEED-NO-MORE

MAGIC WEED KILLER

2, 4-D. Rids lawns of ugly weeds such as dandelion, plantain, chickweed, ragweed, poison ivy, poison oak and many others without injury to common lawn grasses. Just mix with water and spray. 8 oz. bottle covers average lawn. The handy applicator to fit a gallon or half-gallon jug simplifies the job. 8 oz. \$1.00; Qt. \$2.98; Applicator \$3.99.



THE WEED KILLING MIRACLE

NEW IMPROVED WEEDONE®

Contains the Low-Volatile Butoxy Ethanol Ester of 2,4,5-T and 2,4-D

Now Weedone kills woody plants as well as dandelions, plantains and other lawn weeds, without killing grass.

It kills poison ivy, poison oak, the brambles (blackberry and raspberry), honeysuckle and over 90 other woody plants. Sprayed on tops and sides of tree stumps, it prevents resprouting. It does not give off vapors that cause injury to rose bushes, tomatoes, flowers or ornamental shrubs. Harmless to humans and animals.

8-oz. can, \$1 • 1-gal. can, \$6.95

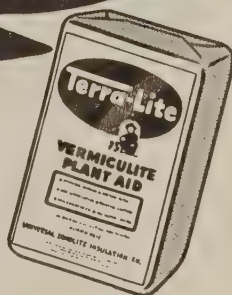
1-qt. can, \$2.75 • 5-gal. can, \$25

Weedone Plastic Applicator. Cap makes handy ½-oz. measure and fits any screw-top gallon jug. All plastic; no sharp metal edges to cut and scratch hands.



Terra-Lite
GROWS MORE...BIGGER
...FINER FLOWERS
AND VEGETABLES

**New Discovery
Transforms
Caked Top Soil
Into Airy Loam!**



Terra-Lite* Vermiculite, the magic garden discovery, worked into your top soil, holds and releases air, water and plant food in just the right amounts. You'll have the finest garden you've ever had, with less toil, less watering. Use it for conditioning soil, building lawns and also for starting seeds, rooting cuttings, mulching, storing bulbs—countless other gardening uses throughout the year.

We will gladly help any user to plan wisely in using Terra-Lite. Just ask us. Come in today.

*Terra-Lite is the registered trade mark of the ZONOLITE Company

PLANT FOOD and SOIL CONDITIONERS

Driconure—Organic all-purpose plant food—with a peat moss base, pulverized for convenient use. Combines quick feeding and slow, steady release of fertilizing elements.

Hy-Gro — Extra-highly concentrated plant food, quickly soluble in water. Excellent starter solution and all-around fertilizer.

Hyponex Plant Food—Can be used in dry or liquid form; teaspoonful makes 1 gallon. Contains Vitamin B1.

Lime (Hydrated)—Sweetens sour soil for lawns, and clover. Is used as a reducer and in combination of many insecticides; for whitewash, deodorizing.

Peat Moss—Fine winter protection for lawns; also as a mulch on strawberry, perennial beds, roses, evergreens, etc. When incorporated in the soil, it promotes growth and supplies humus.

Plantabs—Clean white odorless plant food tablets for indoor or outdoor use.

Rose Food—A balanced combination of organic ingredients, selected for the

particular "make-up" and sequence availability that roses need. Improves the color and size of your roses.

Sheep Manure—An economical and effective balanced plant food. Weed-free and rapid in its action. Supplies an abundance of humus and all the essential plant-food elements.

Terra-Lite (Vermiculite) — Use as mulch to protect plants during winter; doesn't mat down or become soggy. In Spring, work it around base of plants as soil conditioner. Unexcelled growing medium for flats; aids seed germination, speeds root development. Also excellent for storing root crops and bulbs.

Vigoro—The complete plant food. Supplies all the elements growing things need from the soil. Because it offers such complete nourishment, Vigoro helps produce greater yields of finer flavored, more nutritious vegetables. Produces lovelier lawns and flowers. Clean and odorless.

Vitaloam—100% organic soil conditioner. One application per year rejuvenates soil, improves its physical condition, increases yields amazingly. Not a fertilizer, but a necessary adjunct. Widely used by professional growers.

A&D DRICONURE

100% Organic Plant Food.

7½, 25, 50 and 80 lb. bags.

A&D PEAT MOSS

Highest quality, for more than 86 years.

Small "Nugget" and "Cadet" cartons.

2 bushel handy carton.

55 lb. "Jubilee" package.

110 lb. "Standard" Bale.

Products of ATKINS & DURBROW, INC.

HY-GRO SOLUBLE PLANT FOOD

(13-26-13)

**For flowers,
potted plants,
vegetables and lawns**

Brings a balanced diet right to the roots. Use according to directions on package for starter solution and transplanting. Easy to use.

3 oz. 30c—20 oz. \$1.00
—10 lb. \$4.50. Also in 25,
50 and 100-lb. sizes for
estates and larger growers.

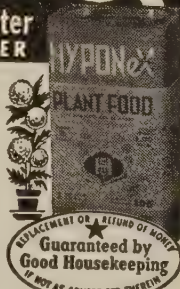
Ask for
FREE booklet

A PRODUCT OF **MCCORMICK & CO.**

HYPONEX

Grows Better Plants Faster
In SOIL, SAND or WATER

Simply dissolve and water all your houseplants, garden flowers, vegetables, shrubs or lawn. Produces stronger plants, more and larger flowers and fruit. Excellent for starting seedlings, cuttings, transplants. Clean, odorless. Won't burn foliage or roots if used as directed. Contains all nutritional elements complete and balanced—plus vitamin B1—Instantly available. Results sure.



1 oz. pkt.	10c
3 oz. can	25c
7 oz. can	50c
1 lb. can	\$ 1.00
10 lb. drum, makes 1000 gals.....	8.00
25 lb. drum, makes 2500 gals.....	15.00
50 lb. drum, makes 5000 gals.....	25.00
100 lb. drum, makes 10,000 gals.....	40.00

PLANTABBS—Good for Everything That Grows

**A Rich Meal of Nitrogen,
Phosphates, Potash, Plus
Vitamin B¹**

Feed them **PLANTABBS**. If you don't get lovelier plants and flowers, and a greater yield of finer vegetables, you get your money back. **PLANTABBS** are clean, odorless, highly concentrated **PLANT FOOD TABLETS** which help produce sturdy stems, luxuriant leaves, strong roots and gorgeous blooms. 25c, 50c, \$1.00 and \$3.50 size boxes.



**Fullton's
PLANTABBS**

PLANT FOOD TABLETS PLUS B1

Now! Available to home growers!

VITALOAM

TRADE MARK
FIRST 100% ORGANIC SOIL CONDITIONER



Used and acclaimed by professional growers for bigger, better, more abundant crops.

Only 1 application is required during a planting season to literally "rejuvenate" the soil. So very easy to use—just mix in the soil.

Comes in powdered form; smooth as velvet to the touch; sweet and clean as a woodland glen. **VITALOAM** will NOT BURN even the tenderest roots or foliage and is so simple to use because you cannot use too much.

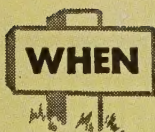


These Begonias were identical when potted. (Left) with **VITALOAM**; (Right) with regular greenhouse potting soil. Grown in Reedy's Greenhouse, Lancaster, Ohio.

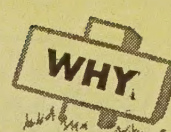
Introductory Package 25c 25-lb. Bag ... 3.50
Large Home Size .. 1.00 100-lb. Bag ... 9.00

VITALOAM SALES, INC.

1211 MAHONING BANK BLDG. • YOUNGSTOWN, OHIO



PLANT FEEDING



Gardeners all know that if the soil is to feed the plants year after year, then the gardener must help the soil by supplying plant food. A large portion of the soil's native fertility is lost each year through removal of plant growth, and by erosion and leaching. Seldom is a soil to be found which has not been exhausted of one or more of the vital plant food nutrients.

Fortunately, plant feeding is a rather simple and easy job. While plants require many different elements from the soil, these can be provided by just one complete, balanced plant food, such as Vigoro. Without odor or muss, modern complete balanced plant food takes care of all the vital nutrient needs of plants, regardless of the soil's natural fertility level.

The physical condition of the soil is also important. If it is low in organic matter, if it bakes and cracks when dry, or is too sandy, it can be improved by addition of humus and conditioning materials such as peat moss, compost, and vermiculite.

A Matter of **BALANCED** Diet

Buying plant food for lawns and gardens is like buying food for your table. To keep healthy, you need a balanced diet . . . you would not think of keeping your children on an all starch diet just because it is cheaper. You know they need proteins and minerals, too. It is the same way with flowers and vegetables, too. They need many differ-

ent plant food elements from the soil for root, stem, fruit or flower development. For these reasons, we recommend Complete Plant Food, which supplies in balanced proportions the vital nutrients plants need from the soil for the best growth and development.

FOR LAWNS:

Follow these 3 steps:

1. Check to see that grass is dry!
2. Apply evenly according to manufacturer's instructions. (With New Process Vigoro, you'll need only 3 lbs. per 100 sq. ft.)
3. Soak the plant food into the soil immediately after applying.

If water is not available merely work the plant food off blades of grass with back of rake. NOTE: If plant food is applied early, before growth starts, steps 1 and 3 are unnecessary. Early thaws and spring rains work the plant food into the soil.

For **FLOWERS, VEGETABLES, BERRIES . . .**

Apply complete plant food at the rate of 4 pounds per 100 sq. ft. of area before seeding or setting plants. For established perennials apply around plants or along both sides of row early in Spring at six to eight week intervals.

For **TREES . . .**

Make a series of holes 12 to 18 inches deep with a 2" soil auger or a pointed stick under the drip of the branches.

Figure the plant food need per tree by measuring the diameter four feet from the ground and allowing 3 pounds of complete plant food per inch of diameter. Fill holes with a mixture of half plant food and half soil or sand.

TWO MORE GARDENING TIPS

Good cultural practices call for keeping weeds out of your lawn and garden.

In the garden, you will have to use the hoe. In the lawn, however, you'll find it simple and easy to spray weeds away with a modern weed killer, such as End-o-Weed, which kills over 100 kinds of weeds without harming ordinary lawn grasses.

Finally, you must keep insects and fungus disease under control. We have a complete line of insecticides. If you have a large area devoted to particular plants, we have the specific chemicals to economically control troublesome pests.

However, if you grow a variety of things, you'll get better results and save time and money by using an all around insecticide, such as End-o-Pest, 3-Way garden dust to prevent and control all major types of chewing and sucking insects and fungus diseases.

If you plant right, feed right, weed right and protect right . . . you'll get better results and more pleasure and benefit from the seed you buy from us.

New Process **VIGORO** Complete Plant Food

FINEST FOR LAWNS, FLOWERS, VEGETABLES

New Process Vigoro is the result of a Swift research program aimed at making Vigoro easier to use and to assure uniform distribution of the plant food nutrients . . . the various elements are chemically hitched to each other to assure uniform feeding. **EASIER TO USE!** New Process Vigoro is now easier than ever to use on

lawns. New Process Vigoro is practically dust-free. This means the particles roll off the blades readily onto the ground.

FEEDS PLANTS RIGHT! Vigoro supplies all the vital nourishment plants need from the soil for the best growth and development. Vigoro is ideal for Lawns, Flowers, Vegetables, and Shrubs.

There is only one Vigoro . . . Swift & Company's trademark for complete plant food.





Easy to Use . . . Efficient

SPRAYERS and DUSTERS

HUDSON "SIMPLEX" PERFECTION

The Higher the Pressure, the Tighter the Seal
Simplest, safest, most dependable compression sprayer ever made. Cover seals from inside of tank . . . pressure provides positive leak-proof seal. Holds 4 gallons. All-welded tank. All-angle nozzle. Comfortable carrying strap with 2½"x7¾" pad.

HUDSON CLIMAX. Same advanced design but with 3½-gallon tank, regular straps, fixed angle nozzle.

HUDSON CLIMAX JR. Same as Climax except 2¾-gallon capacity.



Big Value at Low Cost

HUDSON Funnel-Top SPRAYERS

HUDSON LEADER. Premium quality materials and workmanship. Funnel-top for easy filling. Screw-type lock. Holds 3½ gallons. Large, powerful pump. Valve locks open for continuous spraying.

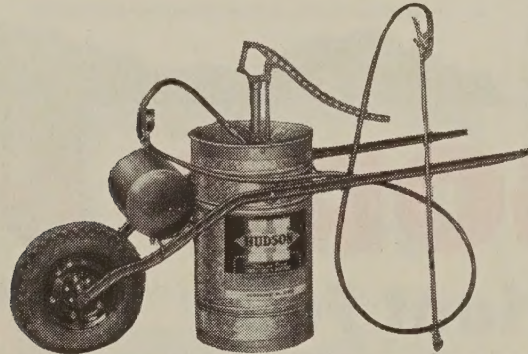
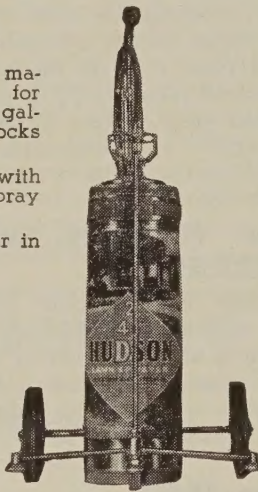
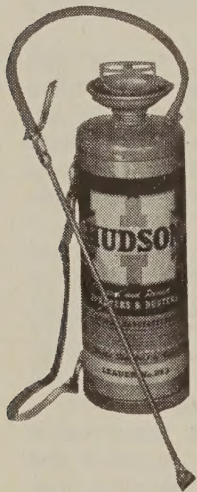
HUDSON BOOSTER. Funnel top sprayer with cam-type lock. 3½ gallon. Rotatable spray control valve.

HUDSON BUGWISER. Similar to Booster in 2½ gallon capacity.

No Weeds—No Work

HUDSON, 2 4-D SPRAYER

Just fill tank with weed-killer solution—pump up—open valve—and push sprayer across lawn. Sprays 24-inch swath. Ideal for liquid fertilizer, too. Copper tank. Chemical-proof hose. Two models—3½ and 2½ gallons.

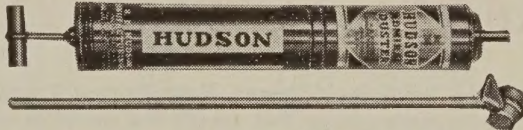


HUDSON Sunshine Porta-Sprayer

Compact, perfectly balanced, powerful sprayer. Provides 250 lbs. pressure. Use for all spraying work. 15 gallon tank . . . non-clogging agitator on strainer. With or without pressure tank . . . with pneumatic, cushion or steel wheel.

HUDSON ADMIRAL DUSTER

Large capacity, long reach, powerful blast. Directional nozzle. Discharges just a puff or a blast at will. Easy to fill. A "must" in every garden and home.

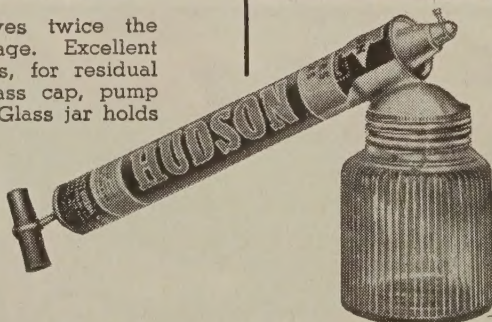


HUDSON HOMESTEAD SPRAYER

Double-tube nozzle gives twice the spray, twice the coverage. Excellent for small home gardens, for residual spraying anywhere. Brass cap, pump end and syphon tubes. Glass jar holds 24 ounces.

HUDSON CRITIC SPRAYER

A flick of the nozzle pin gives fine mist or wet residual spray. Glass jar holds 24 oz. Same principle also in HUDSON MERCURY with heavy tin-plate container.

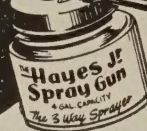


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about other sprayers for garden, home, farm, orchard and other uses.

Kill MORE bugs —quicker, easier

Spray the
HAYES GUN
way!



**Hayes Jr.
Spray Gun,
\$8.45**

For better, easier insect control

One of the great secrets of insect control is full **PENETRATION!** To control insects, you have to cover every part of every plant with your spray. Any spot you don't hit is a safe haven for bugs.

With a Hayes Gun, you get a wet, driving spray that reaches everywhere. Powered by your garden hose, this unique sprayer delivers a penetrating stream. And because of the exclusive Hayes mixing chamber, each drop of spray delivers its proper proportion of insecticide where it will do the most good. There's no drifting, no missed spots. The bugs just don't have a chance!

Try it! See for yourself! Once you've used a HAYES, you'll agree it's the only way to spray!

Hayes-spray your fertilizer, too!



You can fertilize garden or lawn the Hayes way, too. HAYES FERTL-RAIN mixes liquid plant food with water from your garden hose and spreads it accurately, just like the Hayes Gun way to spray insecticides. One filling gives you 15 gallons of solution. Easiest, best of all ways to apply plant foods!

**Hayes
FERTL-RAIN, \$2.95**

Prices subject to change, without notice

TIPS ON TOOLS

Every gardener needs a good hoe, and preferably two. While the regular field hoe has millions of friends, the square top onion hoe will do more types of work, weighs less, and still do everything the field hoe will.

The steel shuffle hoe is a tool preferred by professional gardeners for weeding and mulching.

A matter of necessity

For deeper cultivation, the five-pronged garden cultivator with long handle will do practically everything a wheel hoe cultivator will, though not as rapidly. It is a tool every small gardener needs.

How long is a shovel?

Those who have not used the long-handled, round pointed shovel should try this tool. It gives greater leverage, can be used for shoveling loose soil, or for spading and turning over the soil.

Flat-head vs. bow end rakes

While more costly than the flat-head rake, the bow end rake is much more efficient. It has the weight balanced better, so it is easier to use.

Two trowels better than one!

A good trowel is an essential tool. A cheap trowel is money wasted; it will bend and break. If you have only one trowel, it should be wide enough to dig a good sized hole. If much transplanting is to be done, the narrow bladed trowel is useful.

THE OLD GARDENER ON CULTIVATION

Cultivation is one task that seems to be always present in the garden. Much of the "hard work" can be taken out of it if we observe a few simple facts.



1. Have a reason for cultivating! Cultivating in the garden should accomplish a definite purpose. Killing weeds is the main object. Breaking up a soil crust so that moisture can penetrate is another. Working in plant food may occasionally be needed. Occasionally cultivating is used to remove excess plants.

2. Use the best method for your garden. There are many ways of working the soil. Weed control can be done by hand pulling, hoeing, or, in a few cases, by selective sprays. Scuff hoes, wheel hoes, rotary cultivators all will do a good job.

Soil crusts will almost always be broken if any method of weeding by pulled or pushed tools is used. Plant food can be worked in by pronged cultivators or wheel hoes. Thinning is usually done with a hoe when other cultivating is done, but many persons prefer to thin plants by hand to avoid accidentally killing too many.

Generally the best tools are those that take the least effort. The easier the work the oftener and better it will be done.

3. Use care in cultivating! Deep cultivating is injurious. Plant roots spread out in to the surrounding soil. If you cultivate deeply these important feeding roots will be cut off and the plants will suffer. Tests at experiment stations show that lack of cultivation is less injurious than very deep.

4. Do a thorough job! Light, frequent cultivation that kills all of the weeds is much better than a slipshod one that leaves small weeds here and there to grow and become a nuisance in a short time.

5. Use labor saving methods! Deep soil preparation, and the addition of humus and compost will help prevent soils from crusting. Good sanitation in the garden will reduce weed seeds to a large extent. Mulches will take the place of cultivating in a great many cases. Additional feeding for a growing crop can often be applied in the water when the plants are irrigated.

All of these methods will reduce the need for cultivation, so



Ask us about PLANT FEEDING

The difference between a good lawn—or garden—and a poor one, more often than not, is A MATTER OF FEEDING. The best grass in the world can't give you a good permanent lawn unless the soil is fed, regularly and correctly. Same way with flowers, vegetables, shrubs, trees.

We want to help

That's why we say, "Talk it over with us!" We don't just sell plant foods. We want to help all we can to make sure you get results.

Whether it's window box or a hundred acres to be fed—we have the right food and the "know-how" and the desire to help!

that the remaining areas can be given more attention.

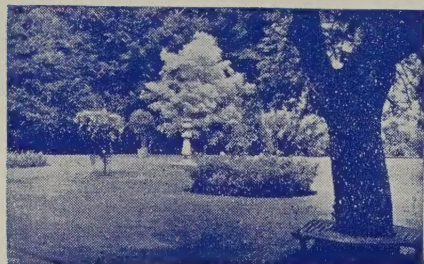
6. Keep your tools in top condition! Clean, well-sharpened tools are necessary in your garden. They save time, effort, and do a better job. Clean the tools after use and protect them from rust. Sharpen the edges of all cutting tools—hoes, wheel hoes, prong weeders, spades, and shovels. Store your tools where they are handy and ready for use.

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IN THIS CATALOG
ARE SUBJECT TO CHANGE
WITHOUT NOTICE**

WE CAN GET IT FOR YOU!

If there is something you want for your lawn or garden—and you don't find it listed in this book—Just ASK US and we'll get it for you gladly and promptly.

It may be a rare variety of flower seed . . . or some special gardening item . . . or perhaps you only want a suggestion. In any event—just ask us! We want you to think of us as your permanent headquarters for all your garden needs.



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Keller's Pure Lawn Seeds

These grass mixtures are made up of the best known grasses—high germinating and best quality, chosen especially for local use. Best Mixture—for permanent lawns. Shady Lawn—Best for shady spots.



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Garden Tools & Accessories

We have a choice assortment of garden tools, wheelbarrows, **EEZY-WEAR** garden gloves, etc. We recommend **VIGORO** for beautiful lawns and gardens, and **ENDO WEED** to get rid of the ugly and bothersome weeds. Yes, you'll find all of your garden needs here at our store.

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